# Stroke Caregiver Guide

## Caring for Your Loved One After a Stroke

The Ohio State University
Wexner Medical Center

# Table of Contents



For digital copy, visit: go.osu.edu/pted5444.

**Talk to your healthcare provider if you have any questions about your care.**

For more health information, go to **wexnermedical.osu.edu/patiented** or contact the Library for Health Information at 614-293-3707 or health-info@osu.edu.

# Taking Care of Your Loved One and Yourself

We hope the resources you find in this book support you in your journey of providing care to your loved one after a stroke.

This book will give you the steps you need to help your loved one with their tasks of daily living. Our staff will work with you to ensure all your questions are answered and your concerns discussed.

It is also important that you make wellness a priority as you provide care.

Talk about how you are feeling with your family, friends, and members of your healthcare team. If you have any signs of high stress, such as feelings of sadness, anger, or trouble sleeping, see your healthcare provider. You can also ask for a referral to a mental health professional in your community.

Your healthcare team can help you find other resources for caregivers in your community, such as support groups.


## Our healthcare team will do all we can to support you.

Please let us know how we can support you and your loved one.

If there is anything more we can do for you, please let us know, or you may call Patient Experience at 614-293-8944.

## Other resources

- Caregiver Wellness Guide: go.osu.edu/pted3912
- Caregiver tips for taking care of yourself and your loved one: go.osu.edu/caregiver_tips
- Family Caregiver Alliance, 1-800- 445-8106 or caregiver.org
- Patient and Visitor Guide: wexnermedical.osu.edu/guide

# Learning About Your Loved One's Stroke

## What is a stroke?

A stroke is a sudden loss of brain function. This is due to a change in the blood flow to the brain, also called a cerebral vascular accident (CVA). There are 2 main types:

- **Ischemic stroke i**s caused by a blockage of blood flow to brain tissue.
  - Thrombus is a clot that forms on the wall of a blood vessel in the brain.
  - Embolus is a clot in a blood vessel that travels through the bloodstream to the brain.
- **Hemorrhagic stroke** is caused by a blood vessel that breaks and bleeds into the brain. This causes a loss of oxygen to brain tissue.
  - Intracerebral hemorrhage (ICH) is bleeding inside the brain.
  - Subarachnoid hemorrhage (SAH) is bleeding around the brain or into the space between the brain and the skull.

## Transient ischemic attack (TIA)

A transient ischemic attack, or TIA, is a brief stop of blood flow to the brain that can look like (or mimic) the symptoms of a stroke. Sometimes called a mini stroke, it can last a few seconds up to 24 hours. Unlike a stroke, a TIA does not kill brain cells, so there is no lasting damage to the brain. When blood flow returns, the symptoms go away.

## In what part of the brain was the stroke?

**Right Side:** A right sided stroke happens when the blood supply to the right side of the brain is stopped. The right side of the brain is in charge of the left side of the body, so it usually causes weakness or paralysis on the left side. It also can cause changes to vision, thought processing, knowing the body's position, and judging space and distance.

**Left Sided:** A left sided stroke happens when blood supply to the left side of the brain is stopped. Because the left side of the brain is in charge of the right side of the body, it can cause weakness or paralysis, or loss of feeling on the right side. It can also cause problems with speech, understanding language, and vision.

**Cerebellar Stroke:** A cerebellar stroke happens in the cerebellum, which is the lower part of the back of the brain. The cerebellum coordinates body movement, controls eye movement, and adjusts posture to stay upright. Based on where the blockage occurs, the effects will vary with this type of stroke.

## Stroke effects

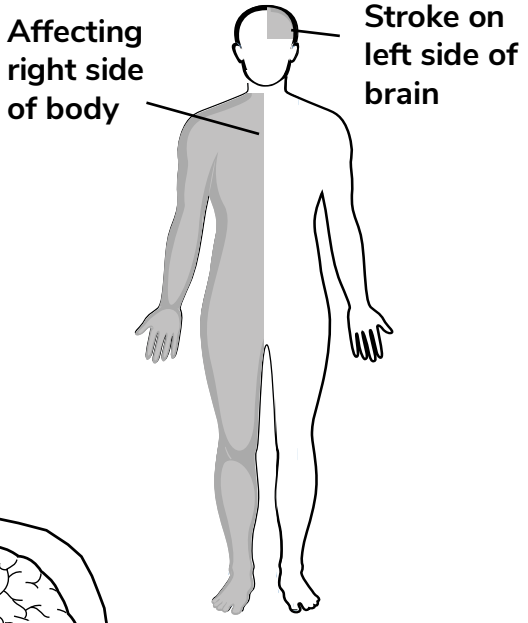
The effects of a stroke depend on the location in the brain and amount of damage to the brain. Understanding the type of stroke your loved one had will also help you to understand what effects it may have caused and how best you can help them to recover.

# Type of stroke

**Have someone on the therapy team help you fill out this page.**

**What type of stroke did your loved one have: _____**

**What are the effects it has had on your loved one? Check all that apply.**

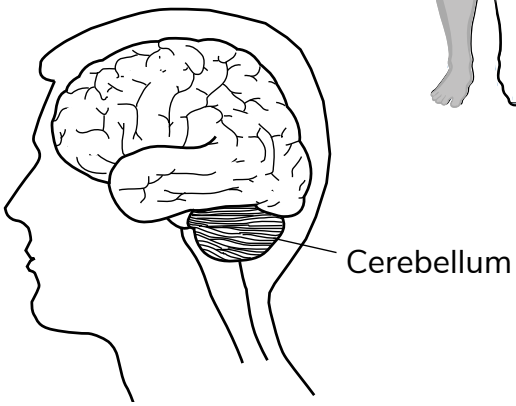



## Left Sided Stroke:

- ❑ Loss of movement on right side
- ❑ Problems with talking and understanding
- ❑ Slow and cautious behavior
- ❑ Lack of attention to right side of body
- ❑ Problems with swallowing
- ❑ Problems with remembering how to do daily tasks
- ❑ Vision problems

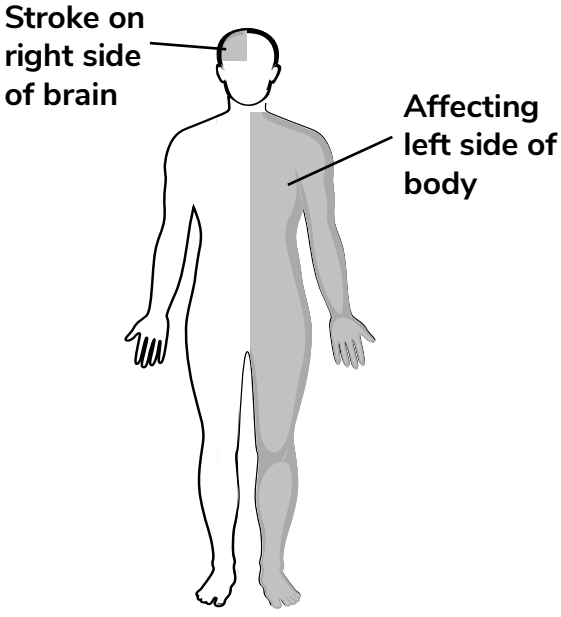
## Cerebellar Stroke:

- ❑ Coordination and balance deficits
- ❑ Eye movement deficits
- ❑ Abnormal head and torso reflexes
- ❑ Dysarthria: weakness in speech muscles
- ❑ Ataxia: lack of voluntary coordination
- ❑ Dizziness, vomiting, nausea, or headache




## Right Sided Stroke:

- ❑ Loss of movement on left side
- ❑ Problems with memory
- ❑ Quick and impulsive behavior
- ❑ Lack of attention to left side of body
- ❑ Problems understanding
- ❑ Short attention span
- ❑ Problems with language
- ❑ Problems with swallowing
- ❑ Problems with remembering how to do daily tasks
- ❑ Vision problems




## Other problems:

_____

_____

# Therapy After Stroke

## Benefits of therapy

Studies show that engaging in therapy after a stroke assists with the recovery process and regaining independence for daily life.

Starting **early** after a stroke has been proven to be safe and helps to improve recovery.

Physical, occupational, and speech therapy can educate and train caregivers to provide support and improve the quality of life for both patients and caregivers.

## Therapy team

### Physical Therapist

The physical therapist (PT) helps people with mobility. This may include:

- Moving in bed
- Using stairs
- Transferring into or out of a wheelchair
- Walking alone or with a walker or cane

The PT may also help improve strength, balance, coordination, and range of motion.

### Occupational Therapist

The occupational therapist (OT) checks your ability to perform daily living skills with a focus on:

- Arm or leg weakness
- Visual problems
- Troubles with thinking such as memory or concentration
- Being safe while grooming, dressing, and other self-care tasks
- Using special equipment such as a wheelchair, splints, or orthotics

### Speech Language Pathologist

The speech language pathologist (SLP) roles include:

- Evaluating speech, language, thinking, communication, and swallowing ability
- Creating therapy programs to address specific needs and goals
- Working on regaining abilities to speak, understand, read, and write
- Introducing tools and strategies for effective communication if speech is severely affected
- Addressing swallowing problems (dysphagia) to ensure safe eating and drinking
- Providing guidance and support to family members on how to assist with communication and swallowing at home

# Discharge Planning

The therapy team will collaborate with you and your family on what is the best discharge placement based on your loved one's abilities. The goal is to get them home with less support, which may take time. Some patients start out at a setting that offers a higher level of help and they progress through these levels of care to become more independent.

## Discharge settings

### Long-Term Acute Care Hospital (LTACH)

Referrals to this level of care are based on how complex the patient's medical needs are and the medical equipment needed.

### Skilled Nursing Facility (SNF)

This care is for patients who need a higher level of medical care/skilled nursing and therapy for their condition (24-hour nursing care). Patients receive physical, occupational, and/or speech therapy based on their needs.

### Inpatient Rehabilitation (IPR)

This care is for patients who need intensive rehab early in their recovery journey. This includes 3 hours of therapy each day including occupational, physical, and speech. Patients are monitored closely by their medical and therapy teams.

### Home with Home Health Care (HHC)

When going home from the hospital, this care is geared toward patients who are more independent and need less care than IPR or SNF. A wide range of healthcare services can be offered at home for their care needs. For patients who are not able to travel, therapy can come to their home.

### Home with Outpatient Therapy

When going home from the hospital, this care is geared for patients who are more independent. It can help them reach their greatest level of recovery by building their independence at home, work, school, and community, and with driving.

### Home with No Services

Patients who are able to do things they were able to do before their stroke, with no problem areas to work on may go home with no services.

# Home Safety Checklist

## Prevent Falls by Checking Your Home

### Bathroom and Kitchen

| | | |
|---|---|---|
| Is the path from the bedroom to the bathroom well lit? | Yes | No |
| Are there grab bars near the toilet and in the shower/bathtub? | Yes | No |
| Is a shower seat used? | Yes | No |
| Are spills cleaned up right away? | Yes | No |
| Is soap buildup in the shower/bathtub removed to avoid slipping? | Yes | No |
| Can the soap be reached in the shower without bending or turning around too far? | Yes | No |
| If it is hard to stand up or sit down on the toilet, is a raised toilet seat used? | Yes | No |
| Are the throw rugs and floor mats secure or removed? | Yes | No |
| Can items used most often be reached without bending down or reaching too far? | Yes | No |
| Can food be prepared at the kitchen table sitting down or at waist level? | Yes | No |

### Bedroom, Living Area, and Outside

| | | |
|---|---|---|
| Is there a table close to the bed with a lamp and space to keep glasses and phone? | Yes | No |
| Are cords pushed back against the wall? | Yes | No |
| Are floor coverings secure and sturdy? | Yes | No |
| Can the phone be answered without having to get up? | Yes | No |
| Can lights be turned on without walking into a dark room? | Yes | No |
| Is a cordless phone, cellphone, or an emergency device available at all times? | Yes | No |
| Is it easy to walk around furniture in the home? | Yes | No |
| Can the switch to turn on or off lights or ceiling fans be reached easily? | Yes | No |
| Is there a handrail on one side of the stairways in the home? | Yes | No |
| Are the steps on stairways even and safe? | Yes | No |
| Are there lights at the top and bottom of the stairs? | Yes | No |
| Is the path from the house to the garage well lit? | Yes | No |
| Are driveways and sidewalks free of cracks, weeds, ice, or other trip hazards? | Yes | No |

**Fix any “No” answers right away to decrease the risk of falling.**

# Balance Changes

Balance is your ability to hold your body up and keep that position while doing other activities. Your balance keeps you from falling. Balance is controlled in your body by several systems working together sending signals and getting signals from your brain.

A stroke can affect the way these systems work together or how the signals get to and from your brain, causing balance problems.

## How your body controls balance

There are three systems in your body that work together to control your balance:

- Visual: your eyes and sight
- Vestibular: sensors or receptors in your inner ears
- Somatosensory: body sensors or receptors that make up the information loop

### Sight

Your eyes and sight let your brain know where you are in your environment. You can see what is around you and how you need to move to be safe.

### Inner Ear

The sensors in your inner ear let your brain know how your head is moving. This system lets your brain know where your head is in relation to the rest of your body and detects changes in the speed of your movement.

### Information Loop

Your body sensors are part of the information loop. These sensors:

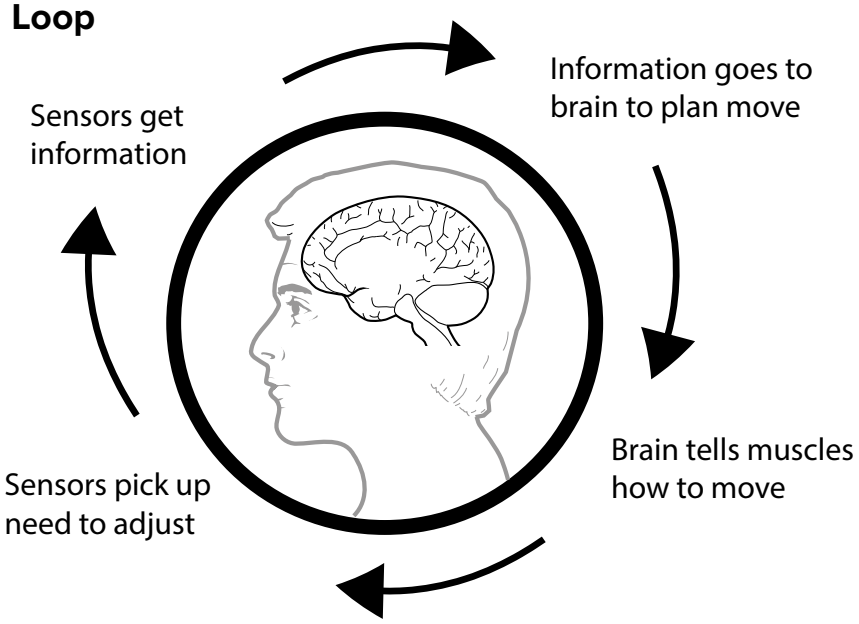
- Tell your brain where your legs, arms, and trunk are in your environment.
- Send signals, so your brain knows where each leg or arm is at any time.
- Tell your brain what direction the parts of your body are moving.
- Take in information from what is going on around you. This is sent to your brain, so your brain can signal your body parts to tell them how to adjust.

**Example:**

When you stand on sand, the sensors in your feet sense the soft, grainy texture of the sand and the sinking of your feet. They send this information to your brain, so your brain can tell the muscles in your leg to take the next step and your trunk to move to keep your balance.

All of the information from the receptors travels to the brain, so the brain can send messages back to your muscles to move in a certain way, so you do not fall. More information about how your muscles move is sensed by the receptors in your limbs and trunk. These body sensing loops or cycles happen over and over in a short period of time.

**Information Loop**




## How balance can change

A stroke can change your balance because of:

- An injury to one of the systems that controls your balance
- Damage to these system connections to your brain
- Injury to your brain

Some common problems after a stroke that can change your balance:

- **Not seeing things clearly**

  If you cannot see clearly, you may not be able to react to what is around you as easily as you did before.

- **Not able to sense position**

  If you cannot sense where your head or trunk is positioned, your brain may have trouble knowing what signals to send to your muscles to keep your body upright.

- **Not feeling motion**

  If you cannot feel and sense where your limbs are moving, it is hard for your brain to be sure where to send your limbs for the next step.

- **Trouble processing information**

  Your brain must be able to take in the information from your environment and develop a plan to adjust your body, so you stay balanced. If the part of your brain in charge of this task is injured from a stroke, the information may not get processed well.

- **Trouble sending messages**

  The brain may also have trouble sending the right messages back to your muscles.

# Is Your Loved One at Risk for Falls?

Your loved one may be at a higher risk for falling after having a stroke. This may be due to changes in balance, medicines, or other factors.

Which of these apply to your loved one?

## Fall risk factors

Balance problems

Changed mental state

Seizures

Dizziness or passing out

Vision problems

Medicines

Feet numb or tingling

Blood pressure

Urgency or incontinence

History of falls

## Fall stoppers

Use call light for help in hospital

Use gait belt

Use bedside commode or urinal

Schedule bathroom times with help

Wear shoes or socks with tread

# Assistive Devices to Help Balance

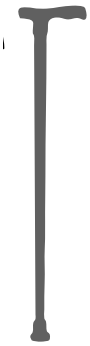
Your therapist will provide training and education during your loved one's hospital stay. The equipment and assist level needed may change as they recover. A gait belt should be used when they need support while moving. Your therapist will teach you about how to use it.

## Equipment

❑ Hemi walker

❑ 2-wheeled walker

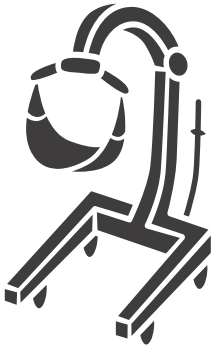
❑ Cane: single point



❑ Cane: 4-point

❑ Gait belt

❑ Patient lift



## Level of assist

❑ Hand-held assist

❑ Independent

❑

**1 person**

❑

**2 person**

## Therapist comments

## Assistive device safety

Using an assistive device can help your loved one move with less pain and more stability. Devices can help improve independence and safety while doing daily activities.

Guide them in using their devices safely by:

- Helping them to walk slowly and looking straight ahead, not down at their feet.
- Using a gait belt as a safe way to support them.
- Clearing away small rugs, cords, or anything else that could cause them to trip, slip, or fall.
- Being careful around pets and small children. They can move quickly and get in the way.
- Making sure the rubber tips on the walker, cane, or other device are clean and in good condition.
- Avoiding slick conditions, such as wet floors and snowy or icy driveways, curbs, and steps.
- Helping them to not step too close to their walker, which can cause them to lose their balance. There should always be space between them and the walker.

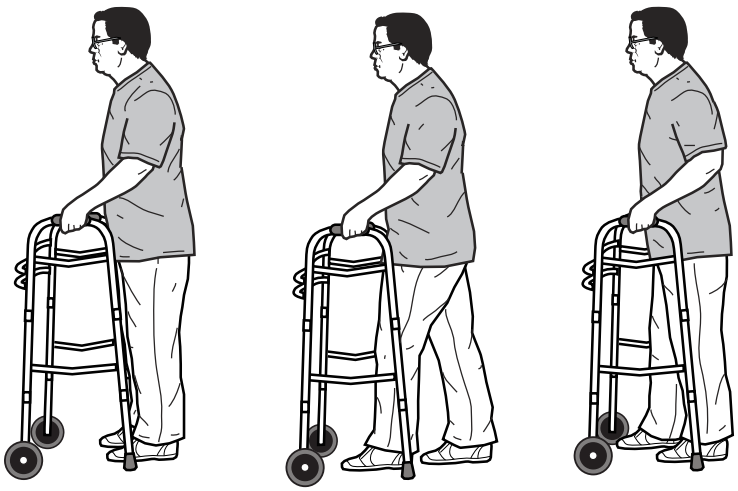
## Safety with stairs

- **Do not use your walker on stairs unless your physical therapist has instructed you and practiced this with you.** Have someone help you on the stairs until you feel comfortable. You should always have a sturdy handrail.
- Always start with your good leg going up and start with your weak leg going down. A good way to remember this is "**up with the good, down with the bad**."
- Place handrails on both sides of your stairs if possible. These handrails should extend past the top and bottom stair.
- Try not to carry anything, or carry as little as possible, when you use the stairs.
- Use good lighting on your stairs. Non-slip surfaces can be put on wood stairs to prevent sliding.
- Use bright tape or paint on the edge of each step, so they are seen more easily.

## Using a walker or other 2-sided device

### Walking

1. Push the walker and place it at a comfortable distance in front of you with all four of its legs on the floor. This distance is often equal to an arm's length.
2. Move your weak leg toward the walker first.
3. Then take a step with your strong leg, bringing it ahead of the weak leg.
4. Repeat steps 1 to 3.



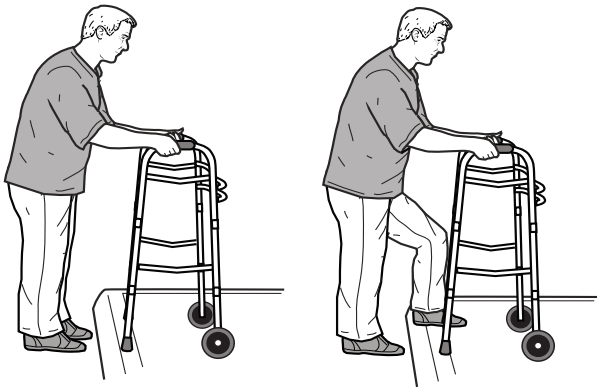
## Stand – Sit Transfer

1. **Slowly** back up to the chair, bed or toilet until you feel it against the back of your legs.
2. Leave 1 hand on the device and reach back for the bed, chair arm, or toilet seat with your other hand.
3. **Slowly** lower yourself to the seat. Be careful not to land heavily in the chair.

## Going Up a Curb

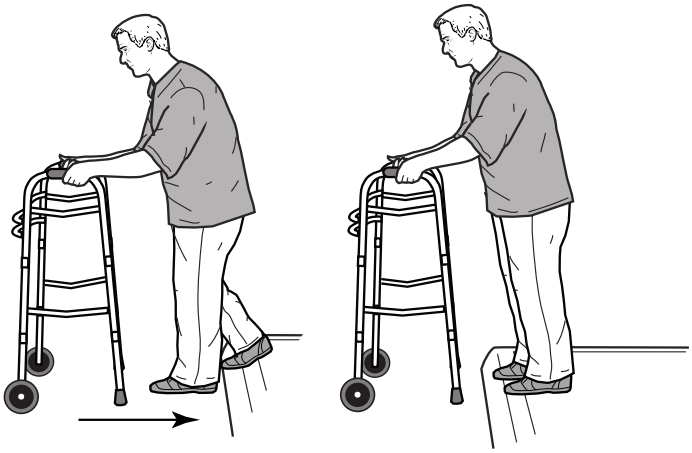
### Forward Method

- Walk up to the curb.
- Put all 4 legs of the walker up on the curb.
- Step up on the curb with your good leg, then step up with your weak leg.



### Backward Method

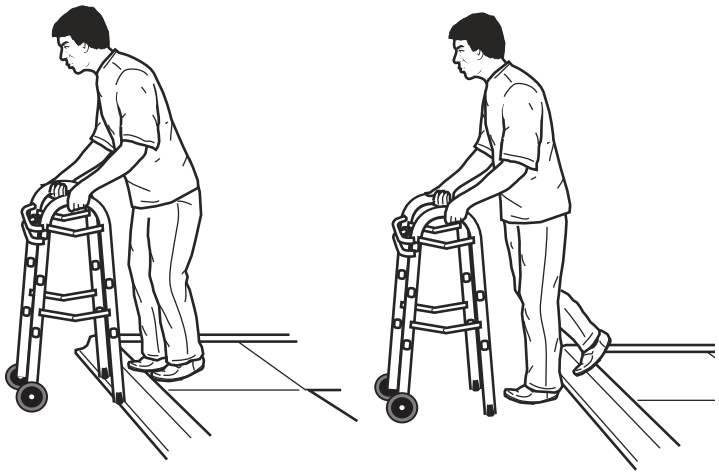
- Walk up to the curb and turn so your back is to the curb.
- Step up on the curb with your good leg.
- Step up on the curb with your weak leg.
- Lift the walker and put all 4 legs up on the curb.
- Turn back around carefully.



### Going Down a Curb

- Walk up to the edge of the curb.
- Put all 4 legs of the walker on the ground below.
- Step down with your weak leg, then your good leg.

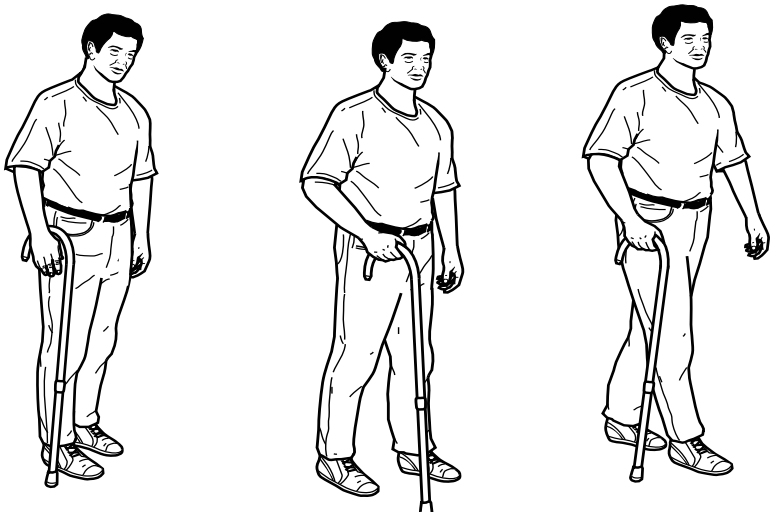
**Never go down a curb backwards.**



## Using a cane or other 1-sided device

### Walking

1. Hold the cane in the hand opposite your weak side. If your right leg is weak, hold the cane in your left hand.
2. Move your weak leg and the device at the same time. It should mirror what your weak leg is doing.
3. Then take a step with your strong leg, bringing it ahead of the weak leg.
4. Repeat steps 1 to 3.

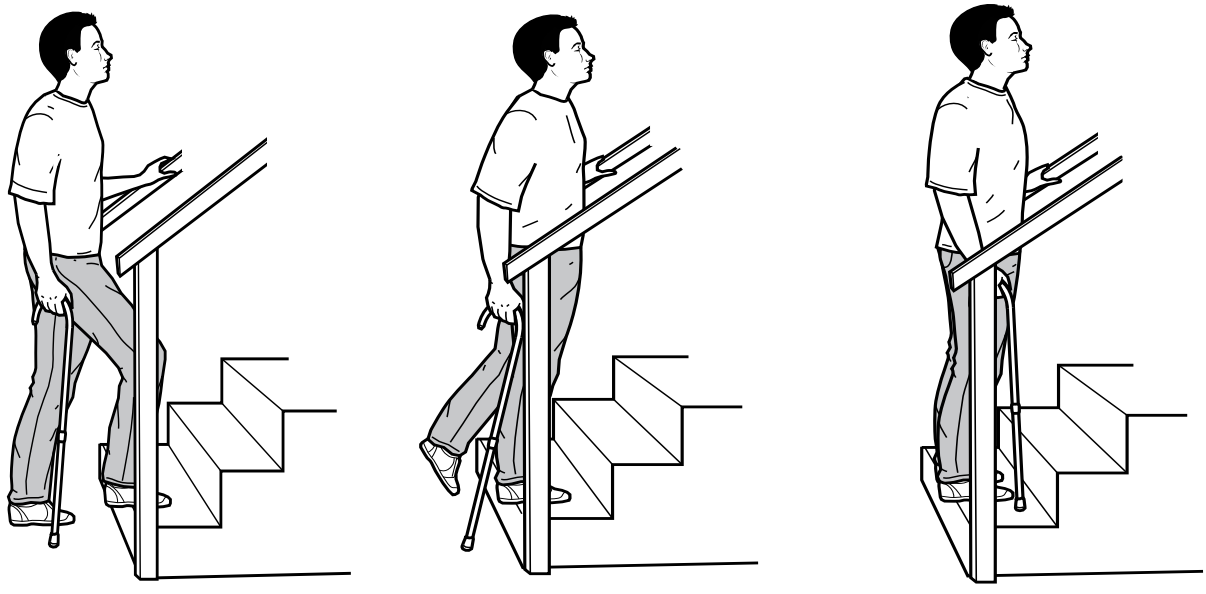


## Sitting

1. Slowly back up to the chair, bed, or toilet until you feel it against the back of your legs.
2. Leave 1 hand on the device and reach back for the bed, chair arms, or toilet seat with your other hand.
3. Slowly lower yourself to the seat, being careful not to land heavily in the chair.

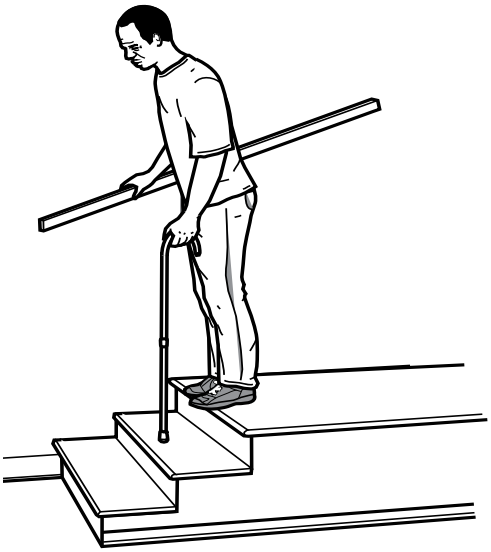
## Going Up the Stairs

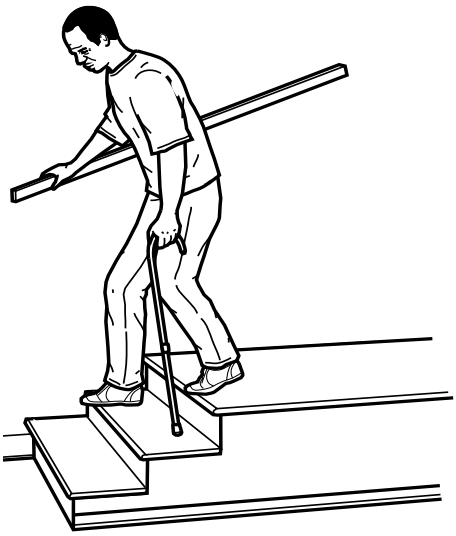
1. Face the step with your device in your hand that is farthest from the handrail. Stand close to the step.
2. Put your free hand on the handrail, then either: leave the cane on the same step as the weak leg, or your therapist may instruct you to put the cane up on the next step.
3. Put your weight on the handrail and the device.
4. Step up with your strong leg.
5. Straighten your strong leg and bring the weak leg up to the same step.



## Going Down the Stairs

1. Face the step with the device in the hand farthest from the handrail.
2. Stand close to the edge and put your free hand on the handrail.
3. Put the device in the middle of the next lower step. Slowly step down with your weak leg.
4. Next step down with the strong leg.





# After Stroke: Position Techniques

After having a stroke, it is common to have weakness or paralysis on one side of the body, called hemiparesis or hemiplegia. Learn how to prevent injuries by protecting the shoulder on the weak side.

## Why stroke can cause shoulder problems

Problems with shoulder muscles can cause the joint to partly dislocate, causing pain with movement. It can also lead to overstretched muscles, tendons, and ligaments. Overall, there can be limited motion, and permanent tightening of the muscles can develop, called contracture. A person who has had a stroke may have less of these effects if the shoulder and arm are properly supported, positioned, and aligned with the body.

**Proper positioning can:**

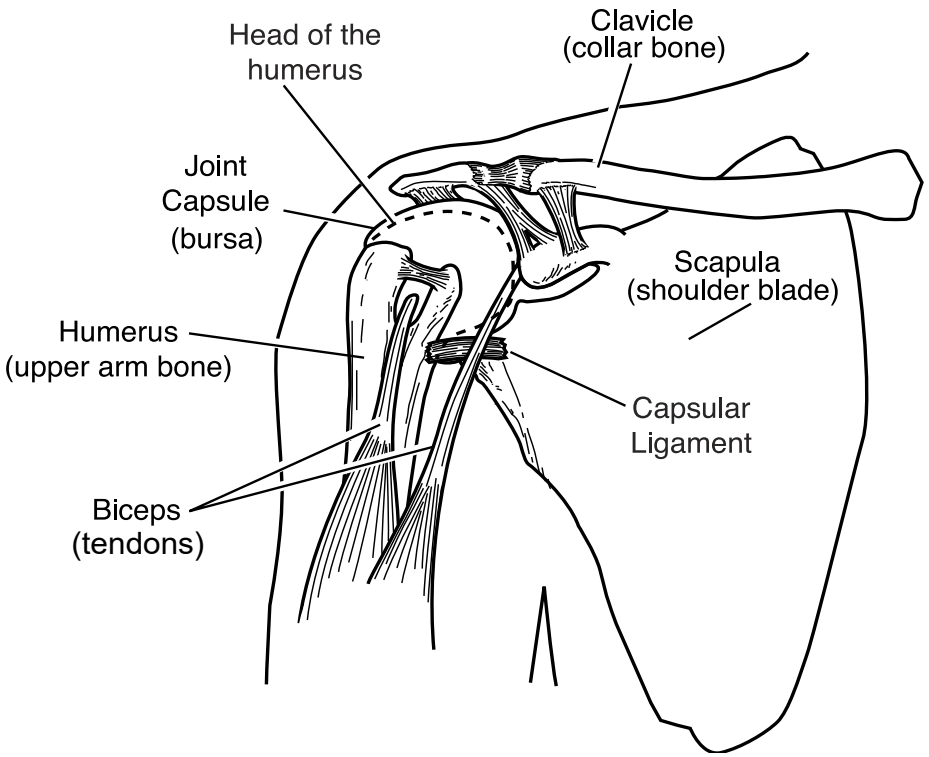
- Lower pain and stiffness
- Improve range of motion
- Limit problems with movement
- Prevent contracture (permanent tightening)
- Prevent subluxation (joint slips out of the socket)
- Improve independence

## About the shoulder

The shoulder joint is made up of 3 main bones:

- Clavicle (front)
- Scapula or shoulder blade (back)
- Humerus (upper arm)

When a person has weakness on one side, the muscles of the arm and shoulder are not able to work as well. Limiting some motions can help prevent injuries.



# Common injury types

## Muscle and Nerve Compression (Impingement)

Your family member may not have the strength to raise their weak arm without help. If you or someone raises their elbow on their weak side above their shoulder, the humerus may get pushed into the scapula socket. The muscle and nerves can get compressed between the scapula and humerus.

## Ball Slips Out of Socket (Subluxation)

If the rotator cuff muscles get weak and lose tone, the humerus in their upper arm may slip down out of the scapula socket. This is called **subluxation**.

Exercises can help keep shoulder muscles strong. Strong shoulder muscles can even pull the humerus back into the socket.

### To protect the shoulder joint:

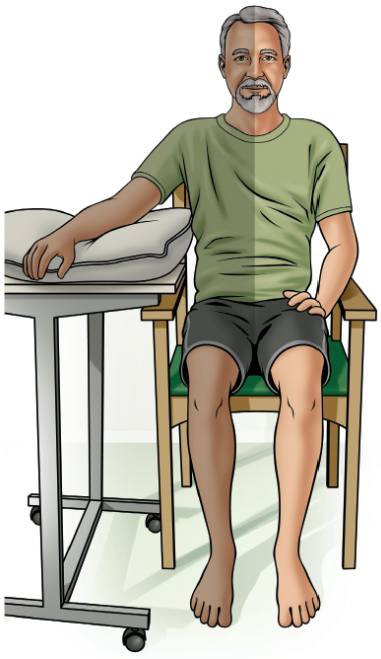
- Do not raise the weak arm above the level of the shoulder.
- Do not pull on or twist the arm at the shoulder in any direction.

# Positioning

These guidelines can be used to help your family member position the shoulder and arm to reduce pain, stiffness, and the chance of injury. This can help increase the chance for improved movement and more independence in the future.

## Sitting

- Sit up straight and balance body weight evenly. Do not slouch.
- Position buttocks all the way to the back of the chair or wheelchair. Keep hips and knees at a right angle and feet flat on the floor.
- Keep head and body in line with hips. You may need to use a pillow or wedge to help keep weight spread evenly across both buttocks.
- Support weak arm with pillows, a table, or half lap board, if in a chair.
- Place the weak shoulder slightly forward, weak elbow away from body, and forearm slightly forward.
- Support the wrist and hand, keeping palm down.
- Placing a rolled-up washcloth in the hand will keep the fingers more open and help protect skin of the palm.
- Check the skin often for redness, bruising, or breakdown.

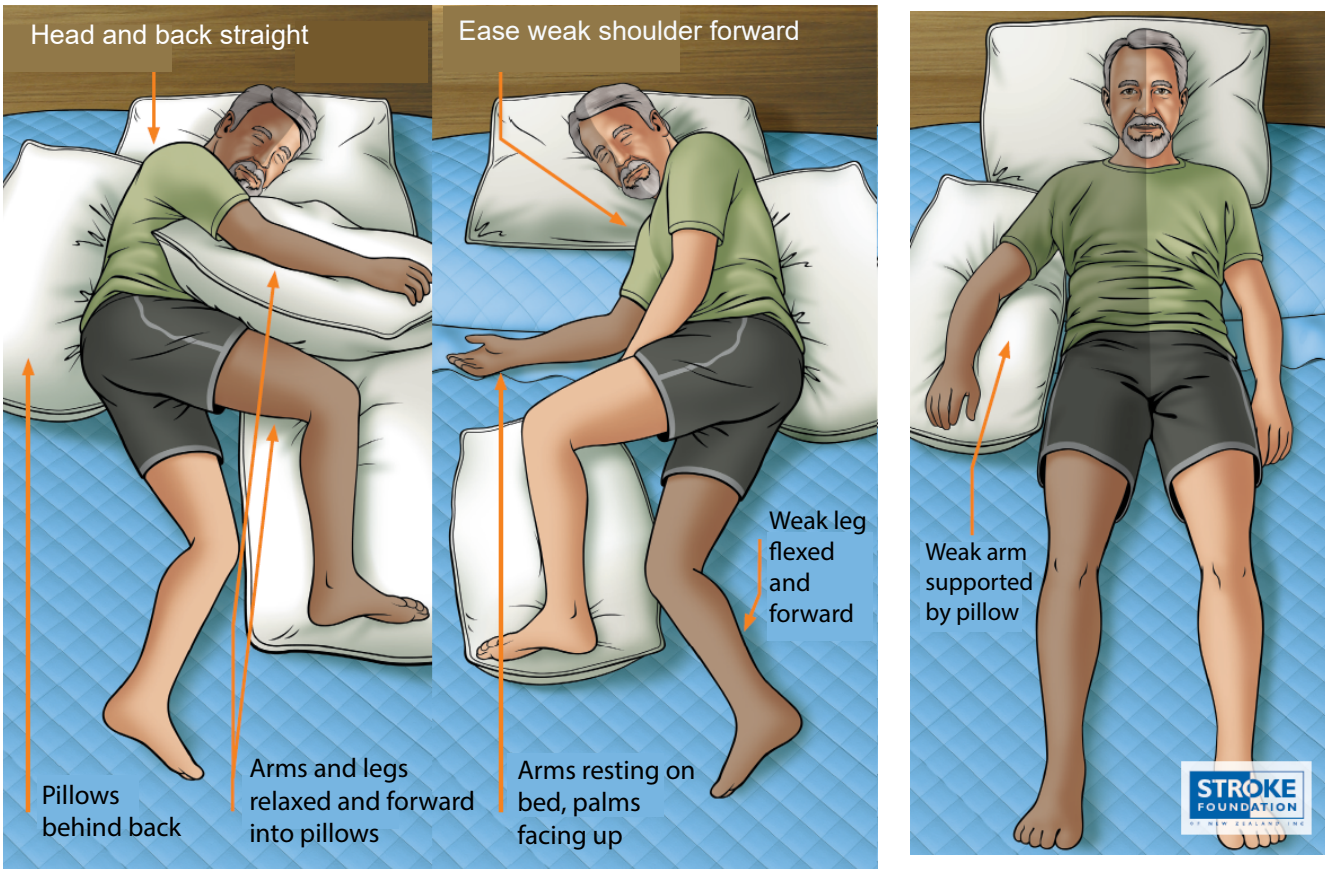


**Sitting in a wheelchair:** Use the same steps as sitting in a chair, with these added supports:

- Use a lap tray for support. Follow the same steps for sitting in a chair.
- Place the foot of the weak side on the footrest while the wheelchair is in motion.

## Lying

- Place flat pillows under head and weak arm for support.
- Place the weak shoulder slightly forward, weak elbow away from body, and forearm slightly forward. Support the wrist and hand, keeping palm down and fingers straight.
- The hand should not be drooped or in a fist, and palm should be facing down. Placing a rolled-up washcloth in the hand will keep the fingers more open and help protect skin of the palm.
- **Do not lie in 1 position for longer than 2 hours.**
- Check skin often for redness, bruising, or breakdown.

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# After Stroke: Transfer Techniques for Caregivers

After going home, your family member may not be able to move or walk safely around the home. As a caregiver, you can help them transfer between different surfaces safely.

## Log roll and bed mobility

If you have access to a hospital bed, raise the bed up to avoid bending over when transferring your family member. Bend at your knees to avoid bending over too far to assist them.

- Have your family member roll toward you near the side of the bed. Give support under their shoulder and at the hip or bottom. It may help to have them roll toward the weaker side if they are able to reach across their body to grab a rail or your hand with their stronger side.
- Instruct them to push up from their elbow on the bed.
- Help swing their legs down onto the ground.



## Sit to stand

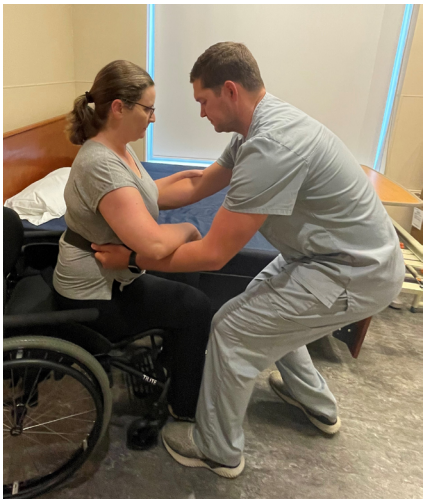
- Place a gait belt around your family member for safety, if possible. A gait belt is a type of belt used to support someone as they move and helps prevent a fall.
- Help your family member scoot to the edge of their seat so that their feet are flat on the ground and at a 90-degree angle under their knees.
- Have them place their hands on the armrests, resting on your arms, or flat by their sides.
- Position yourself in front of them so that you can hold onto each side of the gait belt. In this spot, you can also block their weaker knee with your leg and cradle their weak arm for more support.

- Bend at your knees, have your family member lean forward over their feet, and rock them back and forth 3 times. On the third rock, lift and have them push up from their hands.
- Keep them close to you for better control during the transfer and when standing.

## Pivot transfer

A pivot transfer is useful to help move someone who can support most of their weight, but is too weak to safely take steps to move from one place to another.

- Place a gait belt around your family member for safety. It provides something for you to hold onto and more control during the transfer.
- Try to place the wheelchair, chair, or other surface at a 30-degree to 45-degree angle next to the surface you are transferring from.
- Do the same steps as the sit to stand transfer. It may be helpful to have them pivot toward their strong side to be more stable.
- When your family member is standing or squatting, pivot and shift their weight to turn (or swing) their bottom in line with the surface you want to move them to.
- Instruct your family member to reach back for the new surface. Slowly lower them into sitting.



# Tub transfers

A tub transfer bench helps you transfer into the tub without having to stand and step over the tub ledge.

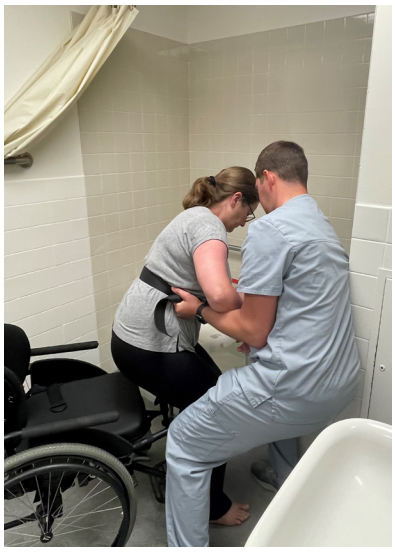
Tips of a safe transfer to a tub transfer bench:

- Tub floors are often higher than the bathroom floor. Adjust the legs of the tub transfer bench inside and outside of the tub for an even bench height.
- Always transfer your family member to the tub transfer bench on their strong side when possible.
- Place a non-slip mat near the tub transfer bench for added safety.
- Wipe down and clean your tub transfer bench often.


Tub transfer bench

## Tub transfer into tub

- Position the wheelchair next to the tub bench so they are **leading with their stronger side**, when possible.
- Start the transfer the same way as before:
    1. Do the sit to stand motion from the wheelchair to standing up.
    2. Pivot their bottom in line with the tub bench seat.
- Back them up to the tub transfer bench until they feel it against the back of their legs.
- Instruct them to reach back to grab the ledge of tub transfer bench and slowly lower down into a sitting position.
- Instruct them to scoot their bottom back toward the middle of the tub transfer bench.
- Assist them in carefully lifting each leg over the tub ledge to position themselves for bathing.



## Tub transfer out of tub

- After your family member has finished bathing, have them dry off and put on a robe. Place a gait belt over the robe.
- Have them scoot to the edge of the tub transfer bench.
- Assist them in lifting each leg over the tub ledge, and turn their body facing out of the tub.
- Assist with planting their feet firmly on the ground and pushing up from the tub transfer bench to stand.
- Position the wheelchair next to the tub bench so they are **leading with their stronger side** from the bench to the wheelchair. Then start the transfer the same way as before:
  1. Do the sit to stand motion from the wheelchair to standing up.
  2. Pivot their bottom in line with the tub bench seat. Stand and pivot to have their bottom in line with the wheelchair seat.
- Instruct them to reach back for the wheelchair arms. Slowly lower them into a sitting position.



## Getting into a car

Know how to safely get into the car. It is better to ride in a mid-size or large car with regular bench seats rather than bucket seats.

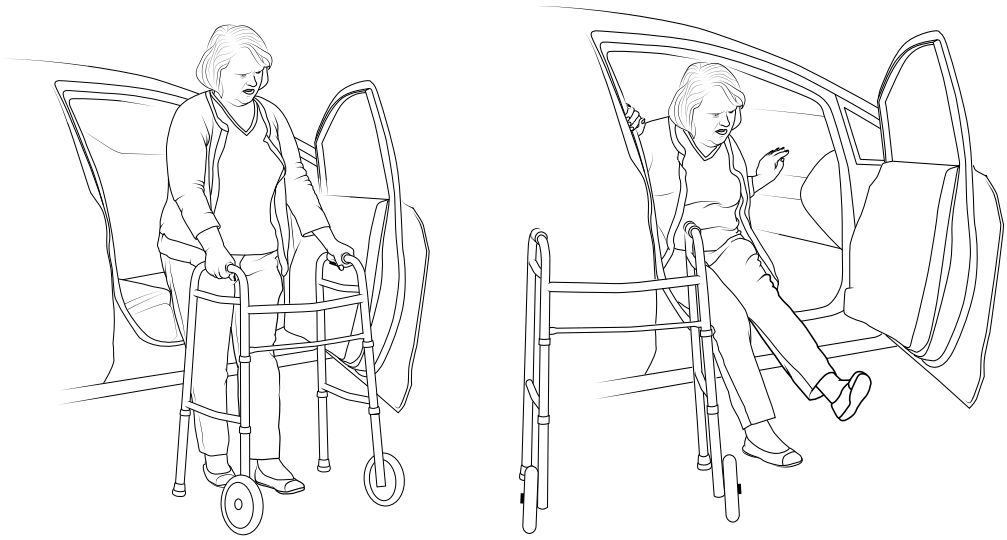
- Use a thick pillow or cushion on the seat.
- Make sure you stop about every 30 minutes to get out and walk around, or at least shift your weight from one leg to another.

### To get into the back seat using a walker:

1. First lower your bottom onto the cushion on the seat in a semi-reclining position.
2. Use your strong leg to scoot yourself farther back across the seat.

### To get into the front seat using a walker:

1. Enter the car on the passenger side and make sure the seat is as far back as possible.
2. Recline the seat back as much as you can so you will be able to scoot up to the back of the seat.



## General tips for transfers

- For these transfers, your family member should be able to put some weight through 1 or both of their legs, depending on the level of weakness they have on the 1 side.
- If your family member has 1 side that is affected, transfer to their stronger side. Cradle or support their weaker arm and block their weaker leg with your leg during transfers.
- Pivot transfers can be used to help transfer your family member to or from surfaces such as a bed, toilet seat, tub bench, bedside commode, chair, couch, car seat, and more.
- If they are using a wheelchair, always lock the brakes, remove the footrests, and remove the arm of the side you are transferring your family member to.

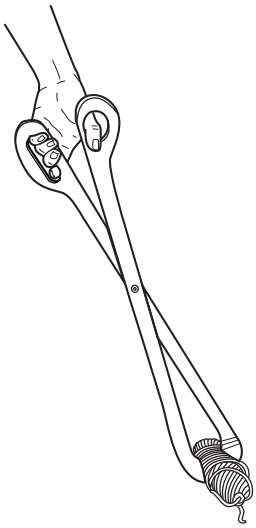
# Using Equipment in Daily Activities

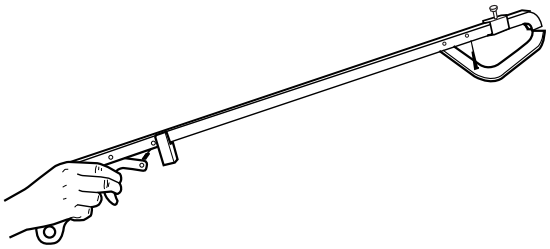
Your loved one may need to use adaptive equipment to help with daily activities because they are not able to move or bend over easily. Talk to your doctor or therapist about options or limits to how they can move safely.

## Reacher

Getting things from cabinets or off the floor can be much easier with a reacher. There are various types available.

- Rearrange your cupboards to have items you use most often within easy reach.
- If you cannot get an item with your reacher, ask someone for help.



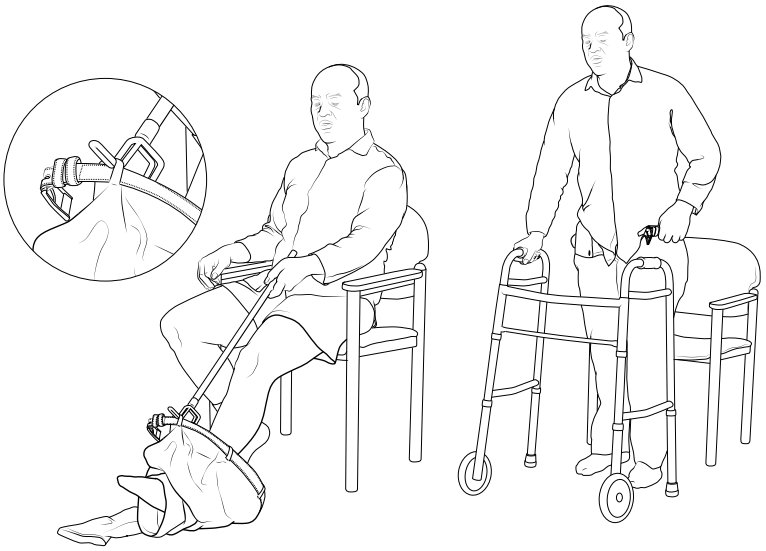


## Dressing

Different devices can help you with putting on your clothes or shoes and socks.

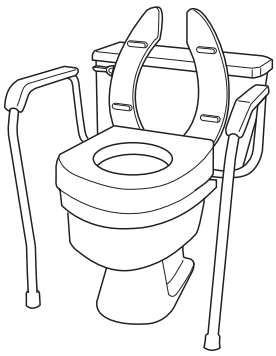
- If you have trouble reaching your feet, wear slip on shoes or use elastic shoelaces so you will not have to bend over to tie your shoes.
- A long-handled shoehorn will help you put shoes on or take stockings and socks off.
- A **dressing stick or reacher** may be used to put on pants.

- Use the hook or the reacher to catch the waist of underwear or pants.
- Place your weak leg in the pants first when dressing and take it out last when undressing.
- Pull the pants up over your knees.
- Stand with the walker in front of you and pull your pants up.



## Using the toilet

A **raised toilet seat** will keep you from bending too far when sitting or standing. The higher seat also makes it easier to stand up from the toilet.



## Bathing

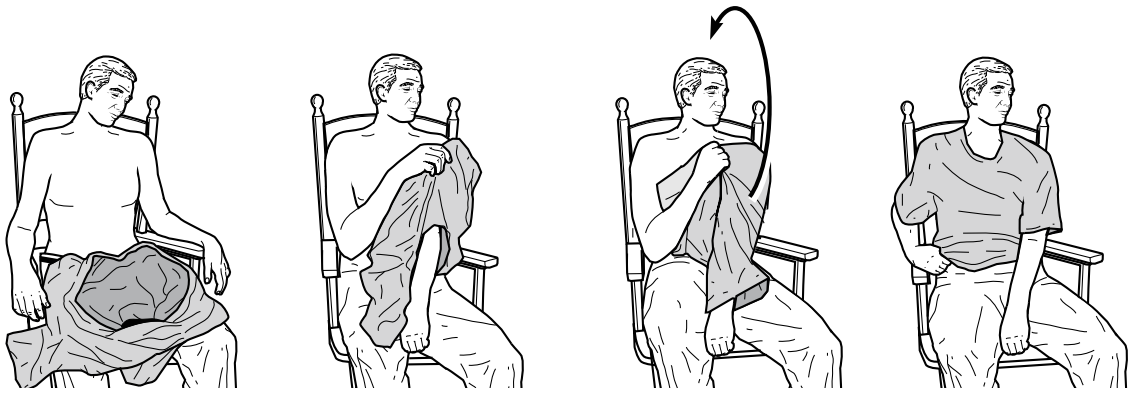
Place the shower bench firmly in the tub. Stand with your back toward the tub. Be sure you have someone with you to help you and to hold the bench steady, if needed.

# Getting Dressed with One Hand

If your loved one has weakness on one side of their body, follow these steps to get dressed. It is easier to do this if they are seated on a firm chair.

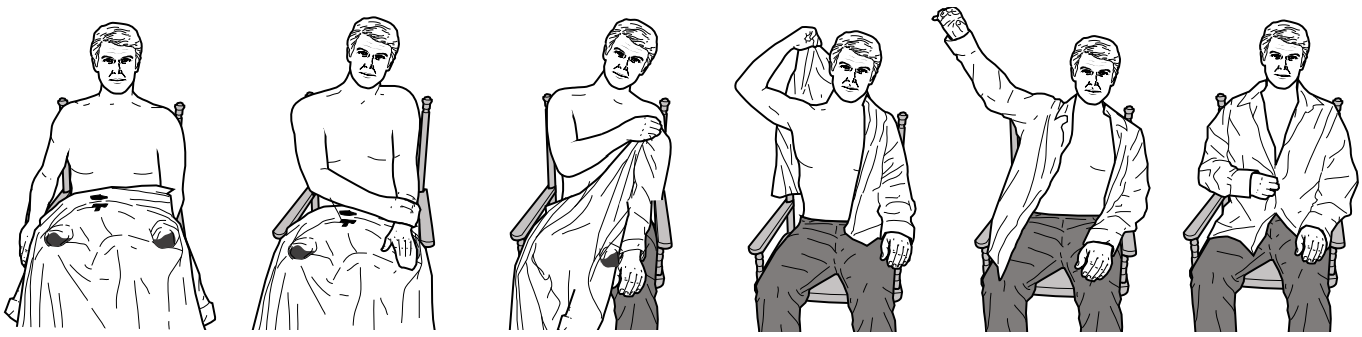
## Putting on a T-shirt or knit shirt

1. Lay the shirt on your lap.
2. Use your strong arm to put your weak arm in first and pull the sleeve up to your shoulder.
3. Put the strong arm in the opposite sleeve and pull up as high as you can between your elbow and shoulder.
4. Use your strong arm to pull the shirt up over your head.



## Putting on a button up shirt

1. Lay the shirt on your lap.
2. Use your strong arm to put your weak arm in first and pull the sleeve up to your shoulder.
3. Bring the collar around the back of your neck and put your strong arm into the second sleeve.
4. Use your strong hand to button the shirt. If you have trouble doing buttons with one hand, you may want to try a buttoning tool.



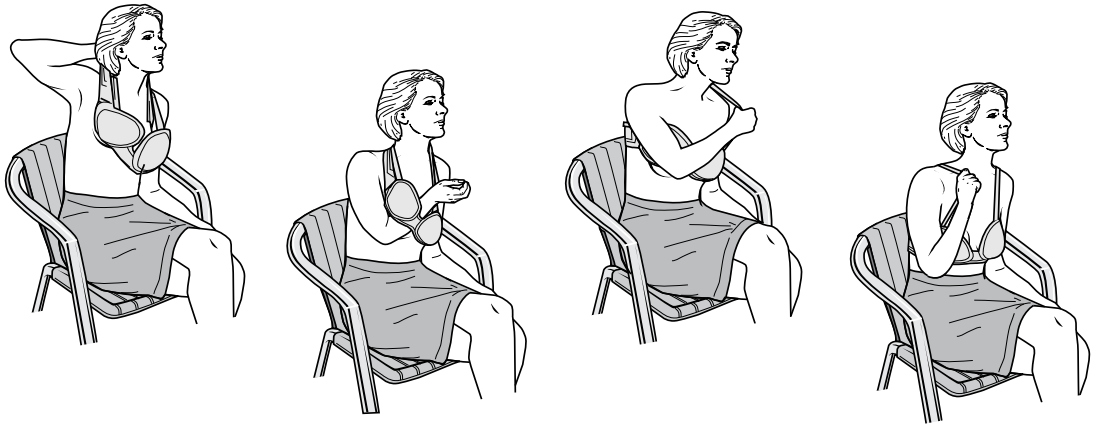
You can also try to button the shirt before you put it on. Then, you can put it on like a T-shirt.

### Taking Your Shirt Off

1. Unbutton any buttons and lean forward.
2. Reach up with your strong hand to gather up the shirt at the back of your neck.
3. Duck your head and pull the shirt forward over your head.

## Putting on a bra

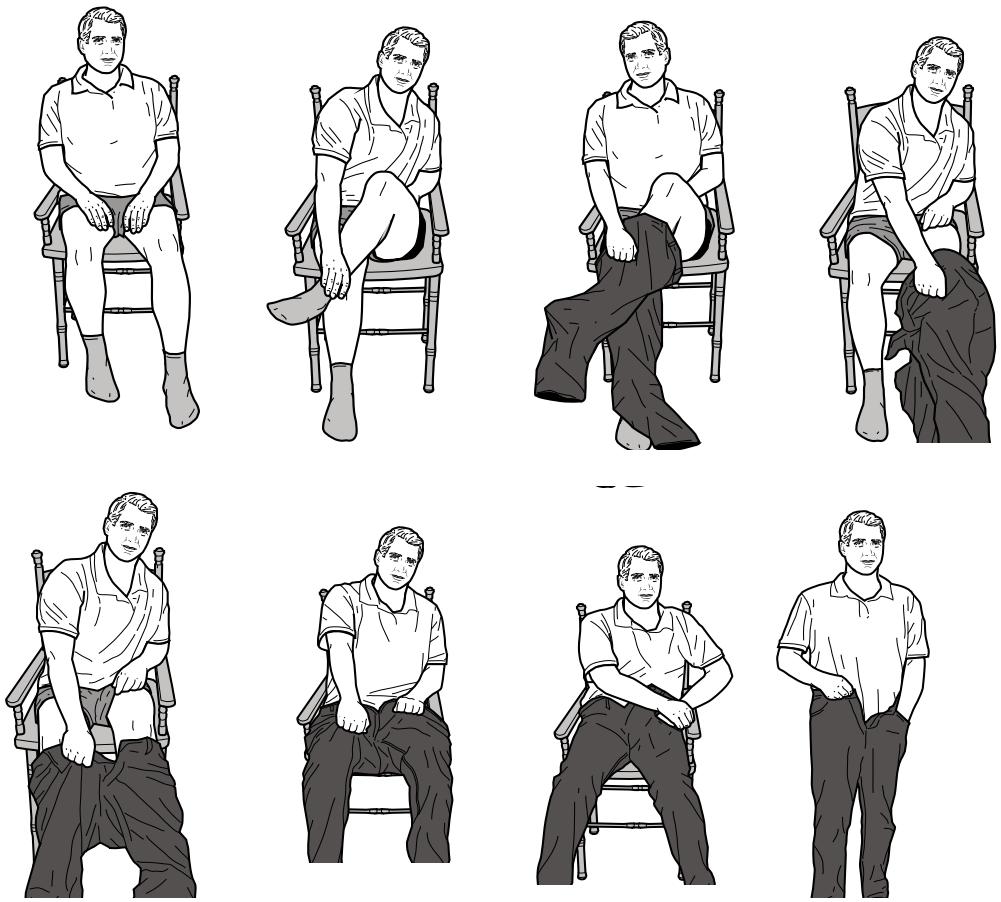
1. Fasten the ends of the bra or ask your caregiver to help you. You can also ask someone to fasten all of your bras ahead of time, so they are ready to put on.
2. Pick up the bra with your strong hand with the straps at the top and put it over your head. Be sure the straps are at the top or the bra will end up being inside out.
3. Slide your strong hand inside the bra and push your arm up through the bra.
4. Use your strong hand to place your weak hand into the opening in the straps.
5. Adjust the bra as needed with your strong hand.



## Putting on pants

1. Sit on a firm chair or side of the bed. Cross one leg over the other. If you are in a wheelchair, have your footrests up and your feet on the floor. Be sure the chair is locked. Use your strong hand to move your legs as needed if you have leg weakness.
2. Pull your pants around your weak foot and up to your knee. Do not pull them above the knee.
3. Uncross your legs, making sure your pants stay on your leg.
4. Put your strong leg into the other leg of the pants.
5. Stay seated and pull your pants up above your knees.
6. Use your strong hand and lift your weak hand to place it in the pocket of the pants. This will keep your pants from falling down when you stand up.

7. Stand up and pull your pants up over your hips. If you are not able to stand on your own, you will need a caregiver to help you up.

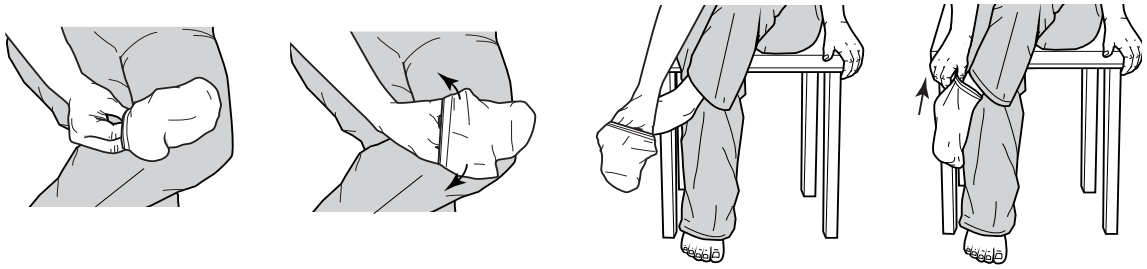


## Taking Pants Off

1. Sit on a firm chair or the side of the bed. If you are in a wheelchair, have the footrests up and your feet on the floor. Be sure the chair is locked.
2. Unbutton and unzip your pants. Work your pants down over your hips as much as you can.
3. Stand up and let your pants drop past your hips.
4. Sit back down and cross one leg over the other.
5. Remove the pants from one leg. Uncross your legs and take the pants off your other leg.

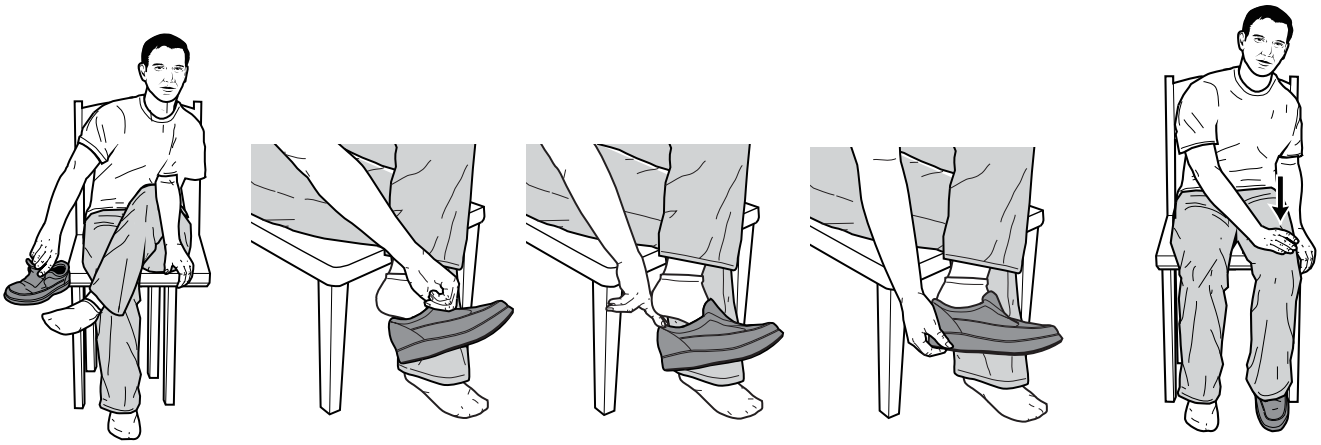
## Putting on socks

1. Cross your leg to rest your ankle on the opposite knee or prop your foot up on a stool if you can lean forward.
2. Put your strong hand inside the sock, just over the fingers, not up to the palm.
3. Slide your toes into the sock, opening the sock by spreading your fingers.
4. Pull the sock up to your ankle.



## Putting on shoes

1. Sit down and cross your legs.
2. Hold the shoe by the shoe tongue. Slide the shoe as far onto your foot as you can.
3. Place your fingers inside the heel of the shoe or place your hand on the heel of the shoe.
4. Slide the shoe further onto the foot.
5. Put your foot on the floor and push on your knee to help your foot go all the way into the shoe.



### Shoe choices and aids:

- Use shoes that slip on or have Velcro closures. Avoid shoes that are too loose or flip flops that may cause you to trip.
- Replace any standard shoelaces with elastic laces.
- A long-handled shoehorn may be helpful.

# Dysphagia After Stroke

Your loved one may have trouble eating or drinking after having a stroke. When a person has trouble swallowing, they may have problems moving food or liquid from the mouth to the stomach, called dysphagia. Stroke is a common cause of dysphagia.

**Swallowing problems may lead to:**

- Food or liquid getting into the airway, called aspiration
- Higher risk of choking
- Poor nutrition
- Dehydration (when your body does not have enough water or other fluids)

## Swallowing changes after a stroke

Many things need to happen for normal swallowing to occur. There are 5 main stages in the swallowing process. Problems can happen in 1 or more of these stages.

### Preparing to Swallow – Anticipatory Stage

**Normal process:**

- Body gets ready to eat or drink
- Begin process of picking up utensils and bringing food or liquid up to the mouth
- Brain sends signals to chew

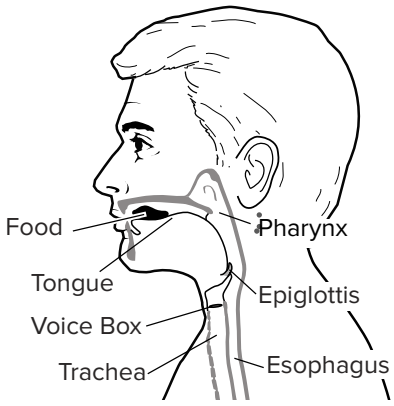
**After a stroke, your loved one may have:**

- Changes in ability to pick up utensils, bring food or liquid up to the mouth or to chew once food is in the mouth
- Problems paying attention to eating and chewing
- Problems seeing food or liquid due to vision or perception changes

### Oral Preparation Stage

**Normal process:**

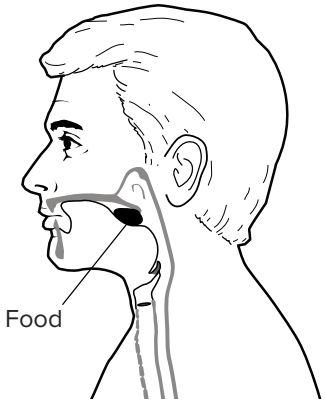
- Food is chewed
- Food or liquid is mixed with saliva and formed into a food ball, called a bolus
- Process uses strength and coordination between the lips, tongue, jaw, and cheeks



**After a stroke, your loved one may have:**

- Trouble taking food off of utensils
- Problems using straws or forming a seal around a cup
- Saliva, food, or liquids leak from the mouth
- Trouble chewing food
- Biting the inside of the cheek or lip
- Food scattering in the mouth
- Food collects between cheek and gums (pocketing)

## Oral Transit Phase



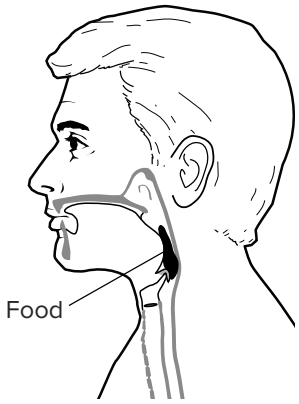

**Normal process:**

- Food or liquid is moved to the back of the mouth by a squeezing action, mostly by the tongue

**After a stroke, your loved one may have:**

- Less strength or coordination to move food to the back of the mouth
- Need to swallow multiple times to clear the food or liquid from the mouth
- Food or drink left in the mouth after swallowing
- Liquids or foods may fall into the throat too soon, causing a risk of them getting into the airway

## Pharyngeal Phase



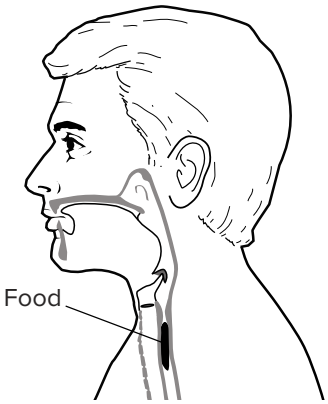

**Normal process:**

- Food enters the upper throat area, above the voice box, and the soft palate (back of the roof of your mouth) pulls up
- Small flap, called the epiglottis, closes at the top of the voice box to close off the opening to the windpipe (trachea)
- Tongue moves backwards and the throat walls move forward
- Actions help force the food or liquid through the throat toward the esophagus

**After a stroke, your loved one may have:**

- Brain does not signal the muscles to begin swallowing at the right time, leading to risk of aspiration
- No feeling when food or liquid goes down “the wrong way,” called silent aspiration
- Throat muscles are not strong enough to squeeze food or liquid through the throat, increasing risk of aspirating or choking

### Esophageal Phase




**Normal process:**

- Food ball or liquid enters the esophagus and is moved to the stomach by a squeezing action

**After stroke, your loved one may have:**

- Changes in muscle that separates pharynx from the esophagus
- Changes in muscle coordination that moves food or liquid through the esophagus

## Checking for swallowing problems

Your loved one will be screened for a swallowing problem when they come into the hospital. A nurse or doctor may ask questions about their swallowing, look at the movement of their mouth muscles, and give them something to drink.

If the nurse or doctor suspects that your loved one may have a swallowing problem, they will be seen by a speech language pathologist (SLP). The SLP specializes in swallowing and communication problems.

The SLP will ask questions about medical history and ability to swallow. The SLP will examine the mouth and ask your loved one to eat and drink different types of foods and liquids to find out what kind of swallowing problem they have. The SLP may recommend more swallow testing.

## Treating swallowing problems

Test results and recommendations for your loved one will be shared by the doctor. Your loved one's treatment plan will vary based on their ability to swallow safely.

**Treatment may include:**

- A variety of exercises for strength and coordination
- Learning to eat in a special way
- Preparing food in a certain way or avoiding certain foods
- Adding special thickeners to liquids
- A feeding tube may be needed for a time if eating or drinking is no longer safe

They may need to continue to work with the SLP after they leave the hospital.

# Thickened Liquids for Safer Swallowing

Your speech language pathologist (SLP) and doctor may want you to thicken liquids for safer swallowing. Some liquids are naturally thick. Other liquids can be made thick with powders or gels.

**Thickened liquids can help:**

- Give better control of swallowing the liquids in the mouth.
- Reduce the risk of liquids going into the windpipe or trachea, which leads to the lungs and can cause a lung infection.

## Levels of liquid thickness

You will be told how thick liquids should be for your loved one to swallow safely. This depends on their problem with swallowing, also called **dysphagia**.

- ❑ **Thin liquids** such as water, milk, juice, coffee, tea, Ensure, carbonated drinks, Jell-O, ice cream, sherbet, sorbet, and broth-based soups. Thin liquids may be mixtures of solids and liquids, such as soups or cereal with milk. **Slightly thick** is the term used for infant formula and supplements.
- ❑ **Mildly thick or nectar-like liquids** such as fruit nectars, maple syrup, egg nog, tomato juice, and cream-based soups.
- ❑ **Moderately thick or honey thick liquids** with the thickness of honey.
- ❑ **Extremely thick or spoon thick liquids** with the thickness of pudding.

## Thickening products

Products are available to thicken liquids without changing the taste. Most can be used with hot and cold liquids. Thickening products can be found at your local pharmacy, from a medical supplier, or ordered online. You do not need a prescription. Some products are not kept in stock. Be sure to order in advance to avoid running out.

Product information for common thickening products is provided below. Visit the product's website for more information and to find a store near you. Consider the cost, ease of use, and availability of the product as you decide what to use.

- ❑ **Nestle Resource ThickenUp Clear, thickenupclear.com, 1-800-240-2713**
  - Product comes as a powder to mix with liquids. Sold in canisters or single serving packets.
  - Pros: Product has a quick mixing time and does not separate over time.
  - Cons: Product reduces carbonation in carbonated beverages and has a longer mixing time if beverage contains protein.

- ❑ **SimplyThick, simplythick.com, 1-800-205-7115**
  - Product comes as a gel to mix with liquids. It is sold as single servings, bulk servings, or in a dispenser bottle with pump.
  - Pros: Product has a smooth texture and does not thicken or separate over time. Product can be mixed in large quantities and stored in the refrigerator.
  - Cons: Product reduces carbonation in beverages and does not mix well with supplements.
- ❑ **Thick & Easy, homecarenutrition.com, 1-800-617-3482**
  - Product comes as a powder to mix with liquids or as pre-thickened, ready to serve beverages. Powder is sold in canisters or as single serving packets.
  - Pros: Product is easy to use and locally available.
  - Cons: Pre-thickened beverages must be thrown away within 10 days of opening.
- ❑ **Thick-It, Thick-It 2 or Thick-It AquaCareH2O, thickit.com, 1-800-333-0003**
  - Thick-It and Thick-It 2 come as powders to mix with liquids. They are sold in canisters or as single serving packets. Thick-It AquaCareH2O comes as pre-thickened, ready to serve beverages, including water, coffee, and some juices. May be heated or chilled. Can use alone or with powdered drink mixes.
  - Pros: Products are locally available.
  - Cons: Powder products take up to 5 minutes to mix well or lumps may form. Powder products may separate over time, and thickening results vary depending on the type of liquid used. They also reduce carbonation in beverages.

## Other tips

- Talk with your dietitian if you have questions about the nutrition of the liquids that you are preparing for your loved one.
- For powder products, add more thickener if the liquid is too thin. If too thick, add more liquid until you get to the thickness level needed.
- Check with your SLP before offering Jell-O, sherbet, sorbet, and ice cream. These products turn to liquid as they melt in the mouth and may not be safe for them.
- Broth-based soups are thin liquids. Do not use unless the broth is thickened correctly.
- Talk to your SLP or dietitian about how to safely cool or freeze liquids for their diet.
- Take their supplies with you when eating out. Many thickening products come in single serving packets that make travel easy.

If you have questions or your loved one is still having swallowing problems, please talk to your SLP. There may be other tips or products for you to try.

# Swallow Guide: Safety with Meals

## Oral care

Please complete oral care 3 times per day.

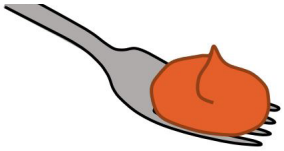
## Liquids

❑ None ❑ Ice chips only ❑ Thin ❑ Mildly thick (like nectar) ❑ Moderately thick (like honey)

## Food

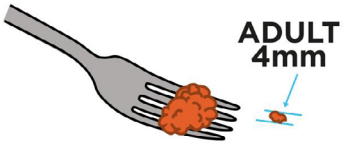
**❑ Pureed**

Food is smooth and free of lumps. Food is not sticky. Does not require chewing.



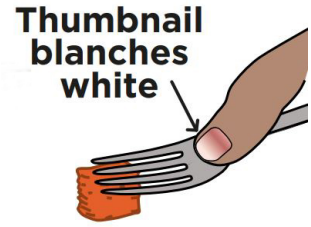
**❑ Minced and moist**

Soft and moist, but with no liquid leaking/ dripping. No biting required. Easily mashed with a fork. Pieces of food must fit between tines of a fork.




**❑ Soft and bite size**

Soft, tender, and moist but with no liquid leaking/dripping. Food can be mashed with pressure on a fork. Bite size pieces no bigger than width of fork prongs.




**❑ Regular**

Normal food with no texture modifications.

## Medicines

❑ Non-oral ❑ Crushed ❑ Whole: ❑ With puree ❑ With liquid

## Strategies

❑ Chin tuck
❑ Head turn: ❑ left ❑ right
❑ Head tilt: ❑ left ❑ right
❑ Alternate solids or liquids

❑ Small, single sips
❑ Multiple swallow
❑ Effortful swallow

❑ Place food on ❑ left ❑ right
❑ Check for pocketing on ❑ left ❑ right
❑ Other: _____

## Assistance

❑ Feeds self ❑ Set up food/tray ❑ Supervise ❑ Total assist

## Equipment

❑ Dentures ❑ Glasses ❑ Straw ❑ Adaptive utensils ❑ Other: _____

# Aphasia

## What is aphasia

Aphasia is caused by damage to the language areas of the brain. It is often due to a stroke, but may have other causes, such as a traumatic brain injury (TBI), tumor, or brain disorder.

Aphasia can affect all forms of communication, including speaking, understanding, reading, and writing. Not all language areas may be affected the same way. For example, 1 person with aphasia may find it easier to read than talk, while another may find it easier to write than to read.

Aphasia can be temporary or permanent. Recovery often depends on how severe the damage is, the person's age, and how well they do with rehabilitation.

## Types of aphasia

### Non-Fluent Aphasia

A person with non-fluent aphasia has trouble getting their words out. A person with non-fluent aphasia may sound hesitant while searching for the right word to say. It can be frustrating for the person affected because they usually understand better than they are able to express.

- The person may know what they want to say but is unable to say it. Attempts to find the right word may or may not be successful.
- The person may only be able to speak in single sounds, words, short phrases, or parts of sentences. Sometimes the person may not be able to talk at all.

### Fluent Aphasia

A person with fluent aphasia does not have trouble saying words, but the words spoken may be nonsense or real words that are used incorrectly. They typically do not understand the words they are saying or what others are saying to them. The person with fluent aphasia may be unaware that their speech is not meaningful. This can lead to frustration and anger toward the listener for not understanding.

## Other speech problems

### Word or Sound Changes

There may be sound or word changes that:

- Have no meaning ("lat" instead of "bat")
- Change the meaning ("mate" instead of "date")
- Are unrelated to the word intended ("table" instead of "map")
- Are closely related to the word intended ("ladle" instead of "spoon")

### Repetition/Perseveration

- This refers to repeated words, phrases, sentences, or ideas. The person may have trouble going from 1 thought to the next. When asked “what do you drive,” they may answer “car” and then continue to answer “car” to the next several questions.

### Naming Problems

- A person may have problems naming common objects that they see. The person usually knows what the object is and how it is used but is not able to say the name of it.

### Oral Apraxia

- A person cannot put sounds in the correct order to be able to say the word they want. There is often face and neck tension, and facial grimacing in an attempt to speak.

## Ways to help someone with aphasia

- Treat the person as an adult. Do not use “baby-talk,” talk louder than normal, or talk about the person as if they are not there.
- Use materials that are of interest and familiar to the person.
- Remove items that can get in the way of communication or are distracting. For example, turn off the TV when talking.
- Help the person to communicate clearly. Use a communication board that has pictures of objects. The person can point to what they need, or it can be used to connect thoughts and correct word choices.
- When giving directions, break long directions into short and simple parts. Allow extra time for the person to respond and do not be afraid of silence.
- Encourage them to write down what they want to say, if they are able.
- Speak slowly, pause between words, and use simple phrases. Emphasize words that have the most important meaning.
- Only ask 1 question at a time. Asking only yes and no questions may be helpful.
- Provide sentences for the person to complete, such as “I want a drink of _____.”
- Provide word choices to help the person find the right word.
- If the person is able, ask them to describe the object to help find the right word. You may say, “If you can’t think of the name of the object, tell me something about it.”
- Do not pretend to understand when you do not! Confirm what has been said and tell the person at what point you stopped understanding.

**Your loved one’s speech language pathologist (SLP) can give you more ideas.** Remember that aphasia affects the person’s language, not their intelligence.

# Dysarthria

## What is dysarthria?

Dysarthria means problems speaking. It is a motor speech disorder that involves the muscles of the face, mouth, and tongue, and coordination of speaking and breathing. It can be caused by nerve or brain damage.

### This disorder may cause:

- Slurred speech
- Shortness of breath while speaking
- Poor coordination of phrasing and breath support
- Nasal sounding voice or speaking as if sick
- Breathy or quiet voice
- Harsh or hoarse sounding voice
- Strained or strangled sounding voice
- Voice changes that sound too low or too high
- Monotone or flat sounding speech
- Slow rate of speech

## What can be done to improve their speech?

A speech language pathologist (SLP) will evaluate speech patterns, issues, and concerns, and develop a treatment program. The program may include exercises for breathing and voice or lip, tongue, and jaw movements. Suggestions may also include those listed below.

### Ways to improve the sound of speech

- Speak slowly
- Break speech into short phrases
- Exaggerate movement of the lips and tongue
- Good posture
- Speak on a full breath of air

### Ways to help keep focus when talking

- Avoid noise and other distractions, such as the TV or people talking
- State the topic at the beginning of your conversation to help listeners understand

### Ways to help improve understanding

- Allow extra time for communication and avoid rushing
- Repeat messages to con irm what is being said
- Write down important information to make sure key details are not lost
- Give positive feedback when messages are clearly understood

Do not pretend to understand when you do not! Confirm what has been said and tell the person at what point you stopped understanding.

# Visual and Spatial Deficits

Visual and spatial deficits are problems that can happen after a stroke because of a brain injury. They affect how someone notices their surroundings and body parts. **Visual deficits** involve issues with processing what is being seen. **Spatial deficits** involve problems with understanding space and where things are in relation to each other, including the position of their own body.

These are not problems with the eyes, but with how the brain processes information from 1 side of the body. It can happen with or without vision problems.

**Key features:**

- Most common on the left side, but can also happen on the right
- Usually due to damage in the right side of the brain
- Can vary in how severe it is
- Often, the person is not aware of their deficits

## Examples

**Visual and spatial neglect or inattention** can cause a person not to notice things on 1 side of their visual field (including their own body) or to not complete a task on 1 side.

**Example 1:**

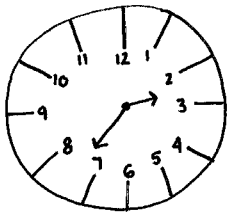
The person does not see the left side of their body.

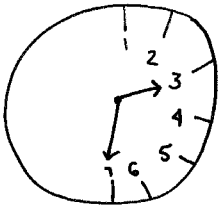
Normal view

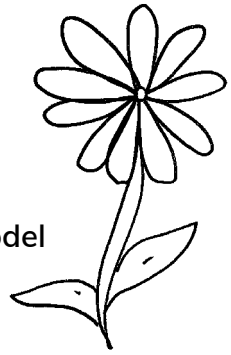
Visual neglect

**Example 2:**

The person does not finish drawing 1 side of the clock and flower.







Model

Patient drawing

## How these deficits affect someone

These deficits can make everyday activities harder, like eating, dressing, and moving around. They also increase a person's risk of falls and make it tough to live without support.

**Common limits include:**

- Eating only one half of the food on the plate
- Leaving the neglected arm hanging off the chair
- Keeping their head or body turned to the side of the stroke
- Forgetting to wash one half of their face
- Missing half of the page when reading
- Bumping into objects on the affected side
- Veering to one side while walking
- Dressing only one side of their body

## Helping someone with visual deficits

If your loved one has these problems after a stroke, the stroke rehab team can teach you how to help. The main goal is to improve awareness of the affected side, so take every chance you can to do this. Ideas may include:

- **Directing attention to the affected side:** Use an object or finger to help guide their attention. You can place your hand on their chin and gently turn their head toward the neglected side.
- **Providing tactile input:** Touch the affected side to help increase awareness.
- **Cued reading:** Place a red mark on each side of the paper to cue reading from one mark to the other.
- **Engaging in puzzles and games:** Lead them in activities like dot-to-dot and word searches.
- **Using lighthouse scanning:** Guide them in scanning the room like the beam of a lighthouse.
- **Involving family and friends:** Have them sit on the neglected side when visiting.
- **Placing objects on the neglected side:** Place items like the tray table on the neglected side, except for the call light. The call light should always be easy for them to find.
- **Including the neglected side in daily tasks:** Using their hearing and touch, encourage them to use their neglected arm or leg in an activity. For example, saying "here is your fork" and guiding their hand.
- **Turn the bed in the room:** Position the bed to encourage them to look toward the neglected side, especially if motivated by watching TV or looking out the window.
- **Approach from the neglected side:** Stand on their neglected side when talking to them.

# Notes

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