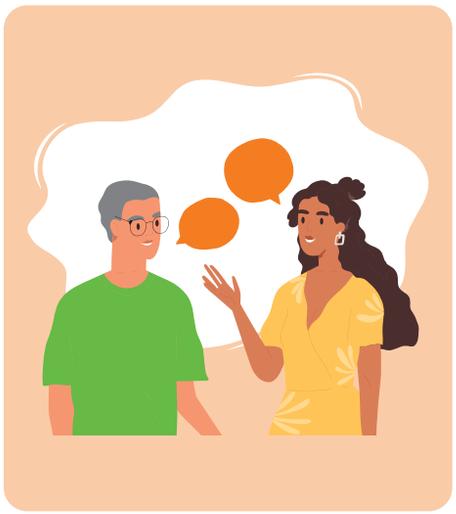
Smart Tips *for* Stroke Care

Smart Tips for Stroke Care:

A healthcare provider's guide to caring for a person with stroke



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How to use this Guide

This guide was intended/created for Personal Support Workers (PSW) working in long-term care in Ontario. However, anyone interested in stroke care can benefit from using this resource, including PSWs in the community, family members, etc.

The goal of the Smart Tips resource is to highlight common changes due to stroke and strategies for managing these changes. Each Smart Tips topic may be used individually or as part of a series. The Smart Tips can be printed freely as a full document or individually according to staff and organizational needs.

For additional information about any of the topics contained within, please contact your regional Stroke Network, or your healthcare provider:

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Disclaimer:

- The information contained in these Smart Tips is for general information purposes only and is intended to support your organizational policies/procedures. The Regional Stroke Networks of Ontario assume no responsibility for errors or omissions in the contents
- These Smart Tips offer information designed for educational purposes only and are not a substitute for professional education, nor do they replace professional medical advice, diagnosis or treatment. Please consult with a physician or other appropriate health care providers regarding medical or health related diagnoses or treatment options

Smart Tips *for* Stroke Care

Introduction to Stroke

Did You Know?

- Stroke is the **3rd leading cause** of death and a leading cause of disability in Canada
- **60% of persons** with stroke will have a long-term impairment that can affect participation in everyday activities
- **1 in 5 persons** living in Long Term Care have had a stroke
- Stroke recovery can be a lifelong process

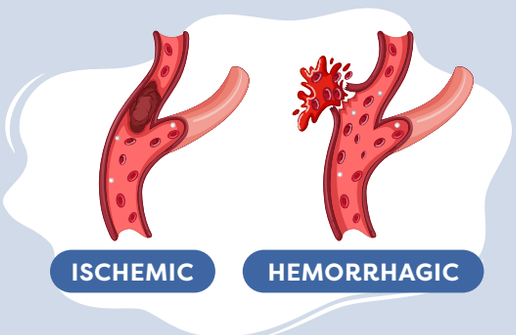
How does the brain work?

The brain is divided into 2 halves called hemispheres. In general, the left hemisphere controls the right side of the body and the right hemisphere controls the left side of the body. The location of the stroke determines what functions are affected. For example, a stroke on the left side of the brain can cause the right arm or leg to be weak.

What is a Stroke?

A stroke is sudden and occurs when the blood supply to part of your brain is interrupted causing brain cells to die.

Two common types of stroke:



Ischemic - Blood supply in the brain is blocked by blood clots and/or buildup of plaque in the blood vessels. More than **75%** of strokes are ischemic.

Hemorrhagic - A blood vessel in the brain leaks or ruptures. Less than **25%** of strokes are hemorrhagic.

What is a TIA?

- Sometimes called a “mini-stroke”, a **T**ransient **I**schemic **A**ttack **(TIA)** is caused by a short-term lack of blood flow to the brain. This may cause stroke symptoms that last minutes to hours.
- TIA is an important warning sign that a more serious stroke may occur soon. TIAs must be treated as a **MEDICAL EMERGENCY** and 911 should be called immediately.

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Signs and Symptoms of Stroke

- ✓ Learn to recognize the signs of stroke and act quickly!
- ✓ While FAST is a good way to recognize and remember these signs and symptoms, the sudden onset of other symptoms may also be indicative of stroke:
  - loss of balance/coordination
  - changes in vision
  - sudden severe headache
  - numbness in one half of the body

SPOT A STROKE - ACT **F.A.S.T**

F **FACE** drooping

A **ARM** weakness

S **SPEECH** difficulty

T **TIME** is critical - call 911

Common effects of Stroke

Every stroke is different. Depending on what part of the brain is damaged by the stroke, the person may experience physical, cognitive, perceptual and emotional changes which may include:

- One-sided weakness/paralysis
- Loss of balance/coordination
- Bladder/bowel problems
- Swallowing problems
- Fatigue
- Trouble communicating
- Loss of sensation (how you perceive touch, temperature, etc.)
- Difficulty paying attention to one side of the body or environment
- Vision changes
- Changes in thinking and/ or memory
- Changes in personality or behaviour
- Changes in emotions or mood (e.g unexpected emotional responses, depression, anxiety, etc)

Understanding the effects of stroke will help you to provide better care and support to the person with stroke and their family. Please refer to the other SMART TIPS for Stroke Care topics for more information.

Recovery after a stroke is possible.

It begins immediately after the stroke and continues throughout one's life.

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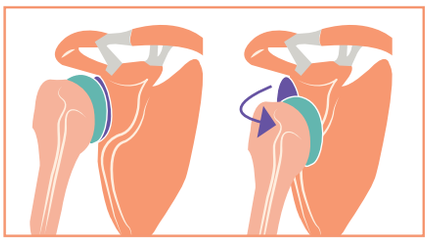
The Hemiplegic Arm and Hand After Stroke

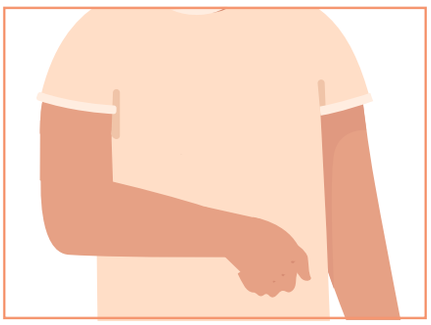
A stroke can cause weakness (hemiplegia) on the affected side. This can impact the ability to move the arm and hand, carry out functional tasks, or protect the arm from injury. Careful handling and care of the arm and hand can reduce pain and prevent complications. This is important because once it starts, pain in the arm and/or hand can become chronic and difficult to treat.

What you should know

- The shoulder is made up of small muscles and ligaments which support the joint. Many important nerves and blood vessels pass through it, making the shoulder, arm and hand vulnerable to injury
- More than half of persons with hemiplegia will experience pain in their affected arm and/or hand. Pain may occur more frequently in persons who are dependent on others for transfers. The hand is likely to develop swelling if not well supported
- Pain can interfere with mood, sleep, day to day activities, and overall quality of life
- <u>Following a stroke the arm and hand can have altered muscle tone. Both high tone and low tone limbs can cause pain:</u>



A **low tone** limb will feel **limp and heavy.** A low tone hemiplegic arm is at risk of overstretching or tearing weakened muscles. This may cause a partial dislocation (subluxation of the shoulder), which is not correctable.



A high tone limb will feel stiff and tight. High muscle tone can pull the arm toward the chest wall, with a bent wrist and clenched hand. It can be very difficult to move the arm or hand, and to provide care. This can contribute to:

- Skin breakdown (underarm, hand)
- Difficulty in assisting with hygiene and
- dressing
- Limited range of motion (contractures)
- Shoulder pain

- A stroke can also cause altered sensation and perception (neglect) of the arm. As a result, a person with stroke can be unaware of the position of their arm. This can increase risk of injury. For example the arm could hang over the side of the wheelchair, injuring the shoulder as well as risking fingers getting caught in the wheel

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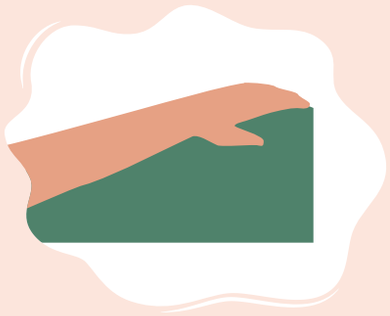
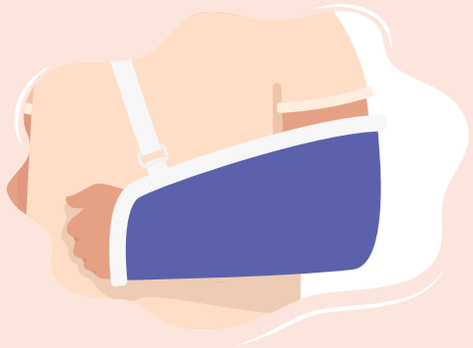
Smart Tips - Always follow the care plan!

Positioning



- Be gentle when moving the arm or hand. Avoid pulling on the limb
- Ensure the affected arm and hand are always supported using pillows or other equipment when recommended in the care plan
- In every position, ensure the elbow and forearm are placed away from the body. Keep the wrist straight or slightly extended and place the hand palm down with fingers open as much as possible
- See Smart Tips for Positioning in Chair/Wheelchair After Stroke and Positioning in Bed After Stroke

Functional Mobility



- Never pull on the person's affected arm or lift from the underarm. Encourage the person to participate as much as they safely can. (See Smart Tips for Stroke Care - Mobility after Stroke and Transfers after Stroke)
- When using a lifting device (e.g. floor lift, ceiling lift) ensure the affected arm is positioned inside the lift sling, and supported in front of the body
- Ensure the arm is supported when the person is standing, transferring or ambulating
- If recommended by a therapist, apply an arm sling to support the weight of their hemiplegic arm during mobility activities

Activities of Daily Living (ADL's)

- Be careful to always support the hemiplegic arm
- Move the arm and hand slowly and gently. This is especially important during tasks like bathing and dressing
- Monitor persons with high tone that have a clenched hand for hygiene and skin health. Look for finger nails digging in the palm (may need trimming), and cleanliness between the fingers
- Do not raise the arm above shoulder level unless the person can do so themselves
- Dressing rule for stroke: hemiplegic arm should be "first on; last off"

Seek extra support

✓ All team members have a role to play in caring for the affected arm and hand. Occupational Therapists and Physiotherapists are experts in hemiplegia. It may be helpful to involve them in the person's care

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Bowel and Bladder Function After Stroke

Bowel and bladder incontinence (loss of control or poor control) are common after a stroke. Incontinence can be a result of damage to the part of the brain that controls bowel and bladder function. Many factors, such as a person's ability to move, think and communicate, can increase bowel and bladder issues. As well, things such as equipment, room layout, medication and co-morbidities can also add to the issue. People with bowel and bladder issues may require frequent trips to the bathroom, may not make it to the bathroom in time and/or have issues with urinary tract infections.

What you should know

- More than 45% of persons with stroke living in LTC experience bladder or bowel incontinence
- Bowel incontinence is less common than bladder incontinence
- Women have higher rates of incontinence after stroke than men
- Incontinence after stroke is associated with poor outcomes including slower recovery, prolonged hospitalization, and low quality of life
- Issues that can result from incontinence include skin breakdown, skin and bladder infections, dehydration, pain and falls
- Persons with stroke who have incontinence may also isolate more and have issues with depression
- Reducing occurrences of incontinence can greatly improve quality of life and self-esteem
- Increased awareness and knowledge of bowel and bladder incontinence among health care providers can help to reduce stigma and encourage individuals faced with these conditions to seek help

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Smart Tips - **Always follow the care plan!**

Observe

- Assess factors that could impact incontinence such as room layout, and/or visual, mobility and thinking deficits
- Get to know the person with stroke and how they indicate their need to go to the bathroom. Can they ask? Do they need assistance? Are they agitated, restless or roaming? This could be a sign they need to use the bathroom
- If language or communication is a barrier, encourage the person to use pointing/gestures or pictures to indicate their needs
- Monitor bowel and bladder patterns, diet and fluid intake. For example, is the person refusing fluids because of fear of being incontinent
- Recognize signs of incontinence, such as frequent urination, soiled/wet clothes or linens, strong odour, urine/feces on bathroom floors, toilet paper as padding inside the underwear and/or increased usage of incontinence products
- Closely watch for possible signs of urinary tract infection, including strong odour, minimal urine output, increased urgency, discomfort when urinating, blood in urine, lower abdominal/back pain/pressure, increased confusion/ agitation, increased fatigue and **fever**

Assist

- Set up the room for easy and safe access to the bathroom
- Always follow the care plan. For example, encourage use of a commode or urinal, toileting for a bowel movement 30 minutes after a meal, regular toileting throughout the day, limiting caffeine intake to 1-2 cups earlier in the day, offering decaf coffee or herbal teas
- Encourage water intake to meet daily fluid goals. Fluids can also be added to the diet through soups, yogurt, jello, ice cream, popsicles, watery fruit such as watermelon or grapes. If possible, arrange to have most fluid intake in the morning and early afternoon, less in the evening and prior to bedtime
- Educate the person with stroke and their family on incontinence after stroke and encourage them to use the strategies put in place
- Provide emotional support and reassurance to people experiencing incontinence

Seek extra support

- ✓ Persons with stroke should be assessed by a trained professional to determine cause of incontinence and to develop a personalized care plan
- ✓ You are the eyes and ears for the team. When you notice signs of incontinence or a possible urinary tract infection, report it immediately

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Eating and Swallowing After Stroke

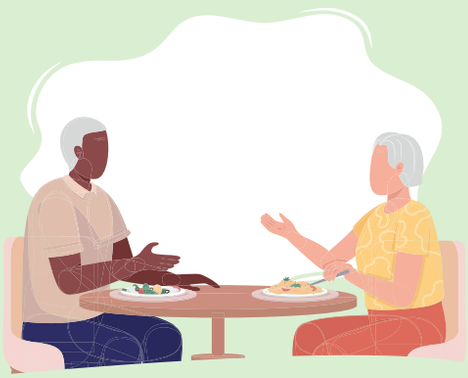
Dysphagia means trouble swallowing and can result from damage to the brain such as a stroke. When a person has dysphagia, they may need changes to their food textures and liquids to ensure that they can safely eat and drink.

What you should know

- ✓ Up to 65% of people will have dysphagia following a stroke
- ✓ Pneumonia can occur when food or liquids "go down the wrong way" (known as aspiration pneumonia)
- ✓ Oral care before and after meals and at bedtime can help reduce risk of aspiration pneumonia
- ✓ Fear of choking and/or a change in food texture or thickened fluids can result in poor intake. This can lead to weight loss and dehydration
- ✓ Social isolation can occur for many people living with dysphagia. It is important to include them in social activities and be sure they can join with safe food and beverage options

Smart Tips - **Always follow the care plan!**

Before you Start



- Perform hand hygiene
- Ensure the person is alert
- Follow the suggestions by therapy staff for use of assistive devices as needed (controlled sip cups, built-up utensil handles, plate guard, anti-slip mat, etc.)
- Ensure dentures are in place and fit well
- Place yourself face to face and at eye level with the person. If unable to do so, sit on the person's unaffected side
- Check that the person is upright for the meal (unless otherwise noted in the care plan)
- Ask for help if you are not sure a food is right for the person. Check the care plan for safe options (e.g. popsicles, ice cream and/or milkshakes may not be okay for everyone)

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Look and Listen for the Following

- Pocketing of food or pills in the mouth or cheeks and under tongue
- Taking a long time to eat
- Drooling or spitting out food
- Shortness of breath after meals
- A wet or gurgly voice
- Throat-clearing
- Coughing or choking
- The person reporting that something is sticking in their throat, their throat feels tight or they describe signs of heartburn

During the meal

- Be patient and avoid rushing the meal
- Avoid talking when the person is eating
- Decrease distractions
- Support the person to eat slowly and feed themself when able
- Confirm the mouth is clear before offering more food and again after the meal
- Food can look different when the texture has changed. Be sure to let the person know what they are being offered
- Be positive! This can have a big impact on how much the person will eat and their pleasure of mealtime

After the meal

- Keep the person seated upright for 30 minutes after eating
- Check for pocketing of food
- Encourage good oral care. Provide help when needed with brushing teeth/dentures before and after meals
- Use a soft toothbrush and avoid relying on oral swabs when assisting with oral care

Seek extra support

- ✓ Careful monitoring is vital because swallowing can change over time and affect a person's ability to eat and drink safely. If you see any changes in a person's eating or swallowing, report this to the team immediately
- ✓ Registered Dietitians and Speech Language Pathologists are experts in eating and swallowing. It may be helpful to involve them in the person's care

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Communication After Stroke: Aphasia

Communication problems are common after a stroke. Aphasia is a common communication impairment. It can affect a person's ability to speak, read, write, and understand what others say.

What you should know

- ✓ 1 in 3 people who have had a stroke will have aphasia
- ✓ Aphasia impacts a person's ability to use language. It does NOT impact their intelligence. They may know more than they can say
- ✓ Communicating with someone with aphasia can take time and effort for both you and the person with aphasia. It gets easier with practice
- ✓ Aphasia can lead to frustration, social isolation and depression
- ✓ Better communication can improve care and quality of life for the person with aphasia
- ✓ A person may have one or both of the following types of aphasia:

  Receptive Aphasia - trouble taking messages IN; difficulty understanding what is heard or read

  Expressive Aphasia - trouble getting messages OUT; difficulty speaking or writing

Smart Tips - **Always follow the care plan!**

Before You Start

- Ensure adequate lighting
- Reduce noise and distractions
- Ensure the person's hearing aids and glasses and/or dentures are in place if needed
- Position yourself face to face and at eye level with the person
- Plan extra time for your interaction and be patient

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Keep it Simple

- Make sure you both know the topic and be very clear when the topic changes
- Speak in short simple sentences
- Ask YES/NO questions
- Offer choice: “Do you want A or B, or neither?”

Be Respectful

- Speak slowly and clearly in a normal tone and volume
- Acknowledge competence “I know you know”
- Include the person with aphasia in conversations - do not speak for them
- Avoid interrupting, allow them time to finish their sentence

Encourage Communication

- Use gestures
- Write down key words during your interaction
- Have them point to words or pictures; use a communication board

Confirm the Message

- Repeat what you think the person said to verify what you understood
- Pay attention to body language and facial expressions
- Acknowledge frustration, it’s okay to admit that you don’t understand
- Offer to try again later

Seek extra support

- ✓ Speech Language Pathologists are the experts in communication. It may be helpful to involve them in the person’s care
- ✓ For more information about Aphasia, please visit the Aphasia Institute **https://www.aphasia.ca/**

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Depression After Stroke

1 in 3 people who have had a stroke will experience depression. Depression is a mood disorder that can occur following an injury to the brain. Depression can affect how an individual thinks, feels or behaves and it can influence daily life functioning.

What you should know

- The risk of depression is greatest in the first 3-6 months after a stroke, but a person can develop depression years later
- Signs of depression can be mistaken for the effects of stroke or aging. Signs of depression can also be overlooked or missed when a person has difficulty speaking or thinking
- Depression is treatable. The most common treatments for depression are medications and counselling. The person may need to try several medications before finding one that works best. Medications may take several weeks to work before you notice a change
- If not treated, depression can affect a person's ability to enjoy activities, participate in their own care and interact with family and friends. Depression can impact quality of life
- Risk of depression increases at times of change, so a person should be monitored when moving into a new setting such as a long-term care home

Smart Tips - **Always follow the care plan!**

Recognize

Look for Signs of Depression:

- Feeling hopeless, helpless or worthless
- Feeling sad, anxious, irritable or angry
- Loss of interest and withdrawal
- Appetite, weight and sleep pattern changes
- Headaches, chronic pain, digestive problems
- Fatigue/lack of energy
- Memory, concentration problems, confusion and slow thoughts
- Difficulty making decisions
- Thoughts of death, dying or suicide

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Encourage and Support

- Add structure to the day by keeping a consistent routine
- Encourage the person to participate in activities they enjoy
- Find activities that can make the person feel better, such as exercise, social activities, listening to music, or reading
- Encourage the person to share their feelings. Listen actively and offer support
- Always be hopeful when working with a person with depression

Educate

- Educate the person and their family about depression and the impact that stroke can have on mood
- Learn how to communicate with people who have aphasia (See Smart Tips for Stroke Care - Communication After Stroke: Aphasia)

Seek extra support

- ✓ Look for signs and symptoms of depression and report any differences in mood to your team
- ✓ All people showing signs and symptoms of depression should be referred to a health care provider with the ability to assess and treat depression
- ✓ Ensure that you get help immediately if a person is talking about death, dying or suicide

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Fatigue After Stroke

Fatigue is a feeling of tiredness or lack of energy and is one of the most common effects of stroke. The signs of fatigue are not always obvious but it can have a significant impact on the person's ability to function day to day and participate in activities.

What you should know

✓ Fatigue after stroke:

- Can affect up to half of persons with stroke but is manageable when using a team approach
- Often starts in the first few weeks after a stroke but can happen at any point
- Is different from the typical tiredness that everyone feels from time to time. After a stroke, even tasks like moving, thinking, talking – can take more effort than it did before
- Is not necessarily related to activity, does not always improve with rest and the person may constantly feel exhausted
- May affect a person's quality of life and relationships, as family and friends may not understand how genuinely exhausted the person is
- Can be mistaken for depression. However, it is important to know that fatigue and depression are different, and each problem needs to be recognized and managed separately (See Smart Tips for Stroke Care - Depression After Stroke)

✓ The intensity of fatigue does not seem to be related to the type or severity of the stroke. A person with a very mild stroke can experience fatigue

✓ Other factors can have an impact on fatigue after stroke. These include:

- Noisy or busy environments
- Complex activities such as social events, bingo, etc.
- Poor sleep or breathing problems while asleep (e.g. sleep apnea)
- Poor nutrition
- Pain
- Some medications
- Other medical conditions (e.g. thyroid problems)

Smart Tips - **Always follow the care plan!**

Encourage & Support

- Encourage good communication by asking the person about their level of fatigue before, during and after an activity
- Encourage participation in activities the person enjoys, even if only partially or for a short time

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Promote Healthy Habits

- Adequate sleep (keep a regular sleep schedule)
- Nutrition (e.g. eat a healthy diet, drink enough water and avoid alcohol)
- Exercise (even small amounts can help improve fatigue over time)

Plan Ahead

- Have the person identify which activities are the most important to them, and plan to complete those activities first
- Help the person to do tasks in a way that uses less energy, such as sitting when possible
- Organize the environment to make tasks easier, such as having the necessary items close by
- Plan activities for when the person will have the most energy. Balance periods of activity with periods of rest. Plan extra time to accomplish a task
- Do not push the person to do too much if they are having a 'better day'. This may leave them exhausted for the next day or two
- Recognize that everyone's level of fatigue will be different and that fatigue can be unpredictable

Celebrate Success

- Observe the person's progress over time and highlight the success they have had in using strategies to manage their fatigue
- Remind them of what they can do instead of focusing on what they cannot do

Seek extra support

- ✓ Occupational Therapists and Physiotherapists can help with strategies to manage fatigue. It may be helpful to involve them in a person's care
- ✓ Tell the team if you notice a change in a person's fatigue level and seek medical advice for any conditions that may be contributing to fatigue

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Cognition After Stroke

Cognition refers to how a person thinks and understands. Cognition includes attention, orientation, memory, insight, impulse control, planning, problem-solving and decision-making. Cognitive changes can occur due to damage to the brain after a stroke. Mood, anxiety, fatigue, sleep, pain and medications are common factors that can also affect cognition after a stroke. As many as two-thirds of persons with stroke experience cognitive changes.

What you should know

- ✓ Changes to cognition are less visible than physical changes but can be just as or more significant
- ✓ Individual impacts of cognitive changes vary from person to person
- ✓ Cognitive changes can affect safety and quality of life. People with cognitive changes may:
  - have difficulty remembering recent or past event (e.g. not remembering to call for assistance before getting up)
  - not always be aware of who they are, where they are and/or the date and time
  - be easily distracted (e.g. wandering off topic or task in conversation or requiring repetition of instructions)
  - need more time to think things through and respond
  - have difficulty recognizing their limitations and abilities
  - act quickly without thinking (i.e. impulsive)

  The above changes can cause distress to individuals with stroke, impacting mood, causing frustration and affecting daily activities
- ✓ Persons with cognitive changes function better with a structured routine that includes tasks that are meaningful to them

Smart Tips - **Always follow the care plan!**

Your Approach as a Health Care Provider

- Be patient
- Speak slowly and clearly. Use communication tools as needed. (See Smart Tips for Stroke Care – Communication After Stroke: Aphasia)
- Provide extra time to allow the person to understand and respond
- Make eye contact to help the person remain engaged in the task
- Collaborate with the person to establish a consistent routine
- Confirm that the person understands what you are asking of them
- Include the family in care

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Provide Guidance for Task Completion

- Give short and simple instructions, one instruction at a time
- Encourage or help the person to start the task
- Break down the task into parts and focus on one activity at a time
- Encourage the person to slow down
- Repeat information and redirect as needed

Be Aware of the Person's Abilities

- Get to know the person. Remember that they may not understand and appreciate their own abilities and limitations
- Provide gentle reminders to the person of their current abilities since the stroke
- Make sure the person is ready to participate (e.g. toileting completed, pain controlled, glasses and hearing aids in place)
- Supervise as necessary

Environment

- Minimize noise and distractions (e.g. TV and radio)
- Encourage the use of aids (e.g. calendars, journal, white board, daily plan)
- Post reminders to promote safety (e.g. call for help, use your walker)
- Help make the environment as safe as possible (e.g. call bell in place, mobility device nearby)
- Help personalize their room (e.g. photos, familiar items)
- Use labels and signs to help organize and locate items (e.g. picture of socks on drawer)

Seek extra support

- ✓ Cognition should be monitored after stroke to understand the person's abilities and develop a personalized care plan. You are the eyes and ears for the team
- ✓ If you notice a sudden change in cognition, report it to your team immediately
- ✓ Occupational Therapists are experts in cognition. It may be helpful to involve them in the person's care

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Vision and Perception
After Stroke

Our brain collects information through our five senses including: vision, smell, hearing, touch and taste. Vision is our most dominant sense. Perception is how our brain interprets information from our senses to understand our surroundings. Changes in vision and perception can occur after a stroke and can lead to loss of independence, safety risks and emotional distress.

What you should know

✓ When someone has changes to vision and perception:

- It may not be obvious
- It can be easy to overestimate the person's abilities and difficult to understand why the person is struggling with activities
- It can have an impact on mood and cause frustration
- It can lead to serious safety risks (e.g. falls)

	Common Changes	What is it	Practical Example	Smart Tips
VISION	Blurry vision	Lack of vision clarity or sharpness	**The person may:** • have difficulty reading • have difficulty finding objects (e.g. white call bell on white sheets or white plate on white table)	Use large print Create contrast where possible (e.g. use coloured tape on the call bell or dark placemat under white plate)
	Double vision (diplopia)	Seeing two images of a single object	**The person may:** • have difficulty finding objects on a cluttered table	Reduce amount of items and space them out on bedside table
	Visual field loss	Most common - lack of vision in one half of each eye (hemianopsia)	**The person may:** • not see hazards in their environment causing them to bump into objects	Tell the person to scan using the 'Lighthouse Strategy' (i.e. imagining the eyes as beams of light sweeping side to side)

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PERCEPTION

Common Changes	What is it	Practical Example	Smart Tips
Depth perception	The inability to estimate the distance between two objects or between themselves and an object	**The person may:** • miss the chair when sitting down • knock over a glass of water when reaching for it	Add red tape on edge of table, sink or toilet seat Cue the person to use their sense of touch to help find items Minimize clutter in the space
Neglect	Decreased awareness of the body (e.g. forgetting their arm) and/or the environment on the person's affected side	**The person may:** • ignore half of their plate of food • roll over onto their affected arm in bed or let their affected arm dangle by their side when sitting	Bring their attention to the affected arm or plate of food so that they can see it Consider turning the plate or repositioning the arm Monitor their neglected side for pain, injury and skin abrasions
Apraxia	Difficulty completing actions the way the person wants or needs to, even though they are physically capable	**The person may:** • use a comb to brush their teeth • hold the hairbrush, but not know how to start brushing their hair	Provide the correct tool, use hand-over hand guidance and do not take over the task unless necessary

Smart Tips - **Always follow the care plan!**

- Ensure supervision or assistance with transfers to promote safety
- Decrease clutter and keep space organized
- Slow down and give the person more time
- Be specific when giving instructions (e.g. on your right, ahead two feet)
- Keep items in consistent locations (e.g. furniture, assistive devices, water glass). If you move an item be sure to put it back
- Improving vision will help with perceptual difficulties. Ensure a well-lit environment and use prescribed glasses with clean lenses
- For neglect and visual field loss, approach the person from the unaffected side and arrange items on their unaffected side
- For apraxia, use short, simple instructions and break tasks into smaller steps
- Educate family on how they can help the person

Seek extra support

- ✓ This document lists some examples of common visual and perceptual changes, but many more exist. Notify the team if you suspect any changes to vision and/or perception
- ✓ Optometrists and Ophthalmologists can provide important assessment and management tools if a person experiences changes to vision after stroke (e.g. glasses, prisms, eye patches)
- ✓ Occupational Therapists are experts in vision and perception after stroke
- ✓ For more information about changes to vision, please visit The Canadian National Institute for the Blind **https://www.cnib.ca**

Smart Tips *for* Stroke Care

Behaviour After Stroke

After a stroke, people may experience changes in behaviour that can be the result of damage to the brain. Some changes may include quick shifts in emotions, anger and aggression, lack of interest/energy and actions that are out of character for the person. The impact of stroke on behaviour depends on where the stroke was in the brain, how long ago it happened, how severe the stroke was and how they behaved before the stroke. How the person is adapting to the effects of the stroke can affect behaviour as well.

What you should know

- All behavior has meaning. There are many things that can trigger behavioural changes. Common triggers include pain, loneliness, boredom and lack of independence with activities such as toileting or dressing
- Behaviour changes are not attention seeking, but are most likely due to the stroke and may be the person's way of expressing their needs
- Some behaviour changes can be related to frustration as a result of difficulty communicating
- Changes may not be consistent. There may be good days, bad days and variations throughout the day
- Stroke can have an impact on personality which can be hard on the person with stroke, their loved ones or other caregivers
- Some people may have less control over their emotions and/or get upset over things that would not usually bother them
- Laughing or crying at inappropriate times can occur; this is referred to as emotional lability
- Behaviour changes can impact a person's quality of life and can lead to negative outcomes such as social isolation and depression

Smart Tips - **Always follow the care plan!**

Recognize

- Identify what triggers responsive behaviours and share information with the team
- Be aware when someone is starting to feel anxious or frustrated and consider how you might respond (e.g. removing the person from a loud environment)

Continues on next page.

Encourage & Support

- Look for ways to promote independence
- Offer to take a break to reduce frustration and try again later
- Explain what you are planning to do and involve the person in their care
- Identify coping strategies to support a person to manage their emotions
- Encourage involvement in meaningful activities

Strategies

- Get to know the person and find out what they enjoy
- Speak in a quiet, calm manner and be patient
- Inform the person when their behaviour is inappropriate and reinforce positive behaviour
- Keep a consistent routine and respect preferences when possible
- Reassure the family and the person with stroke that loss of emotional control is common after stroke
- Use a problem solving approach to care
- Share known triggers as well as any effective coping strategies with the team

Seek extra support

- ✓ Knowing what the person enjoys can help with providing care. Family can help you learn more about the person you are caring for. Share this information with the team
- ✓ Recreation Therapists are experts in supporting persons with stroke to engage in meaningful activities. It may be helpful to involve them in the persons care
- ✓ If you are struggling with behaviour challenges, connect with the team about accessing supports in your area

Smart Tips *for* Stroke Care

Mobility After Stroke

Mobility is defined as the ability to move one's body. Examples of mobility include moving in or out of bed, transferring to a chair, and walking. A stroke can cause weakness to one side of the body (hemiplegia), changes in sensation and altered muscle tone. This can impact a person's ability to move. Regular mobility is important. It can improve function, decrease pain, enhance mood, and prevent skin breakdown and contractures.

What you should know

✓ **There are many factors that can impact mobility including:**

The Person's Abilities	The Environment	The Caregiver
Communication Cognition Weakness and muscle tone Balance and posture Coordination Vision and perception Sensation Mood and fatigue Motivation Pain	Lighting Equipment Space Resources available Organizational policies and procedures	Knowledge Skill Confidence Wellness Size/height Familiarity with the person

✓ **Practicing safe mobility can:**

- Prevent falls
- Prevent injuries to the person with stroke
- Prevent injury to the caregiver

Smart Tips - Always follow the care plan!

General Principles of Safe Mobility

- Plan for extra help if needed. Do not attempt to assist a person alone if you are unsure of what they can do. It is always better to have more help
- Encourage the person to do as much as they can. This will allow the person to feel safer and more in control of the movement, and will minimize the risk of injury
- Do not rush. Move slowly and gently. This will allow the person to participate more successfully and minimize anxiety
- Recognize that the person's energy levels can change throughout the day. This may affect their ability to mobilize, and they may require more assistance if fatigued
- Your goal in assisting with mobility is **not to lift** the person with stroke, but to support them in the mobility activities they can consistently and safely do. Always follow your organizations lift policies

Continues on next page.

Before You Start

- Prepare the environment. Ensure the necessary equipment is nearby and in good working order, the space is clear, and the lighting is adequate
- Communicate the plan to the person and any helpers before you start to move. Use simple, clear instructions, and demonstrate the action if needed. Check that they have understood
- The hemiplegic shoulder can easily be injured during mobility. Be mindful of the person's arm during mobility activities and handle very carefully
- Be mindful of any lines (e.g. feeding tube, oxygen)
- Think about your own body mechanics:
  - keep your body close to the person you are helping to move
  - bend your knees
  - keep your back straight
  - avoid twisting

During Mobility

- Position yourself on the person's affected side and as close as possible (front/side). Be sure not to block the direction of movement or the person's vision of the path of movement.
- Continue to communicate with the person. Offer verbal and visual cues for each step of the activity and allow time for them to understand and respond.
- Provide support at the shoulder blade, the hip, or waist to help guide the movement. Never hold onto clothing. Never pull on the person's affected arm.
- See Smart Tips for Stroke Care: Bed Mobility, Transfers and Ambulation After Stroke for additional details on transfers

After Mobility

- Before you leave, ensure that the person is well supported and is in a safe and comfortable position. See Smart Tips for Stroke Care - Positioning In A Chair/Wheelchair After Stroke
- Ensure that all necessary items (e.g. call bell) are within reach
- Check on the person and offer position changes frequently
- Let the team know if there is a change in mobility status

Seek extra support

✓ Occupational Therapists and Physiotherapists are experts in mobility and transfers. It may be helpful to involve them in the person's care

Smart Tips for Stroke Care (2023) was created by members of the Regional Stroke Networks of Ontario.

Smart Tips *for* Stroke Care

Bed Mobility, Transfers and Ambulation After Stroke

A stroke can cause weakness, altered muscle tone, loss of coordination, changes in sensation and decreased body awareness. These can impact a person's ability to move. Careful handling of the person during movement can improve safety and comfort.

What you should know

The safety and success of any mobility activity depends on a number of factors (See Smart Tips for Stroke Care – Mobility After Stroke).

There are four main types of movement which include **bed mobility (e.g. rolling), transitional movements (e.g. lie to sit, sit to stand), transfers (e.g. pivot or stepping to move between surfaces such as bed and chair), and ambulation (e.g. walking).**

Always protect and never pull on the affected arm when moving (See Smart Tips for Stroke Care - The Hemiplegic Arm and Hand)

Smart Tips

Always follow the care plan and lift policies at your organization!

Rolling in bed

Before rolling, ask the person (or help them) to:

1. bend their knees and place feet flat on the bed
2. initiate the roll by allowing the knees to fall, turning the head, and reaching with the arm towards the direction of the roll

Assist the person by helping at the back of the shoulder blade and hip as needed

Moving from Lying to Sitting

Once the person is on their side, ask the person (or help them) to:

1. Bring their feet over the edge of the bed by moving their knees up towards their chest
2. Push up with the bottom arm to sit up. If assistance is needed, place one hand underneath the bottom ribs near the shoulder blade, and one hand on the upper hip.

Once the person is sitting safely, lower the height of bed if possible, to allow feet to be in contact with the floor

Continues on next page.

Moving between sitting and standing

Moving from Sitting to Standing

- Stand on the person's affected side

Ask the person (or help them) to:

1. Shift their hips forward towards the edge of the sitting surface
2. Position the feet shoulder width apart, with the heels on the floor under the knees
3. Sit up tall, then bend forward at the hips while looking forward (not at the floor) with back straight
4. Push up from the bed with both hands, if able. DO NOT allow the person to pull on the walker to stand
5. Push through their legs with their weight equally distributed on both legs. If assistance is needed, assist under the buttocks.

Moving from Standing to Sitting

- Before sitting, the person should feel the back of their legs touching the edge of the sitting surface (e.g. chair, bed, etc.)

Ask the person (or help them) to:

1. Reach back to place their hand(s) on armrests or the sitting surface
2. Bend forward slightly, then bend their knees to lower themselves slowly to sitting
3. Shift their hips back on the sitting surface

Transferring between surfaces

- It may be easier for the person to move towards their stronger side, if possible
- Position the chair/commode as close to the bed as possible. Ensure brakes are applied and arm/foot rests are out of the way
- Ask the person (or help them) shift their hips forward to the edge of the sitting surface
- Position yourself as close to the person as possible on their weaker/affected side without blocking their movement
- Following the care plan for the individual, guide the person onto their feet and help them shift their hips from one surface to the other. Cue the person to reach towards the surface they are transferring to. If a second helper is needed, they can help guide the hips from behind

Walking

- Once standing, pause to ensure balance before walking. If a gait aid is used, have it nearby
- While walking, stand on the affected side, maintaining a close distance to steady the person as needed
- Encourage the person to look up/forward to where they are going rather than at the floor
- Assist the person to avoid obstacles in their path if vision or spatial awareness is affected

Seek extra support

- ✓ Physiotherapists and Occupational Therapists are experts in mobility and transfers. It may be helpful to involve them if there are questions or concerns.
- ✓ Notify the team if you notice a change in the person's ability to transfer or ambulate.

Smart Tips *for* Stroke Care

Positioning in Bed After Stroke

A stroke can cause weakness (hemiplegia), changes in sensation and body awareness, and altered muscle tone impacting a person's ability to position themselves in bed. Careful positioning can improve joint alignment, awareness of the affected side, reduce fatigue and improve comfort and safety.

What you should know

- ✓ A stroke can cause a lack of sensation on one side of the body, so it is important to monitor the person's skin for redness or other signs of skin breakdown
- ✓ Development of shoulder and/or arm pain is common after a stroke. The affected arm should always be well supported to prevent pain and injury (See Smart Tips for Stroke Care- Hemiplegic Arm and Hand)
- ✓ Positioning the person on the affected side for a period of time has benefits such as increasing circulation, sensation and awareness

Smart Tips – Always follow the care plan!

Before You Start

- Explain to the person what you are going to do and encourage them to participate
- Ensure you have everything you need to position the person safely, such as extra help, or devices/equipment (e.g. slider sheet) as required
- Ensure that you use good mechanics to avoid injury

Safety Considerations

- Take your time. Position the person by moving slowly and gently, be mindful of the person's arm as you move
- Avoid pulling on the person's affected shoulder/arm as this can cause irreversible injury
- Check that the person is comfortable before you leave the room
- Ensure the head of bed is at the recommended height (especially if the person has difficulty swallowing)
- Make sure all necessary items are within the person's view and reach (e.g. call bell) on the unaffected side
- Check on the person regularly and offer position changes frequently (e.g. every 2 hours)

Continues on next page.

Bed Positioning Examples

The proposed examples are based on the ideal position of a person with stroke. Some individuals may have limitations that make these recommendations uncomfortable or even impossible. Please consider comfort first as you position the person.

Positioning on Back

- Ensure the head and shoulders are centered in the bed
- The affected arm should be supported/elevated on a pillow, and positioned slightly away from the body with the elbow extended and the elbow crease facing slightly upward. Place the palm down with fingers straight
- Place folded towel (or similar) beside affected thigh to prevent leg from rolling outwards
- Use recommended equipment to reduce pressure under heel especially if the person is unable to move their leg

Lying on Affected Side

- Ensure the person is not lying directly on top of their affected shoulder. Draw the shoulder blade slightly forward, and have the elbow extended and hand supported with the palm up, fingers straight
- Support the unaffected arm forward on a pillow
- Place a pillow lengthwise behind their back so the person does not roll backwards
- Position the person with both legs bent, pillow in between knees and ankles

Lying on Unaffected Side

- Support the affected arm forward on two pillows. Elevate the hand as needed with fingers spread
- Place a pillow lengthwise behind their back so the person does not roll backwards
- Position the person with both legs bent at the hips and knees, a pillow in between knees and ankles

Seek extra support

- ✓ All team members have a role to play in positioning a person with stroke
- ✓ Occupational Therapists and Physiotherapists are experts in positioning. It may be helpful to involve them in the person's care

Smart Tips *for* Stroke Care

Positioning in a Chair/ Wheelchair After Stroke

After a stroke, a person's ability to move and position themselves can be difficult. This may increase their risk for falls or injury.

What you should know

- ✓ Many persons with stroke may experience pain and changes in muscle tone. Development of shoulder and arm pain is common. The arm should always be well supported while sitting to help prevent pain (See Smart Tips for Stroke Care - Hemiplegic Arm and Hand After Stroke)
- ✓ Proper positioning with use of equipment specific to the needs of the person will increase comfort and safety
- ✓ A stroke can cause a lack of sensation on one side of the body, so it is important to monitor the person's skin for signs of breakdown. Skin breakdown can happen when the person cannot feel pressure, wetness, temperature and the effects of pain
- ✓ After a stroke, the person's sense of where their body is in space (because of neglect, decreased awareness etc.) can result in poor positioning of arms, legs and trunk/torso
- ✓ After a stroke, the trunk/torso and one side of the body can be weaker (i.e. hemiplegia) which can make it difficult to stay centred and in the best sitting position

Smart Tips - **Always follow the care plan!**

Before You Start

- Make sure the person is wearing safe and suitable footwear that will not slip off
- Confirm you have the needed equipment (e.g. lap tray, footrest, seatbelt) available and ready to apply and that the seat is clear
- Be sure that the chair/wheelchair is in good working order, the brakes are on, and if required, footrests are attached as indicated

Continues on next page.

Once In The Chair/Wheelchair

- Be sure the hips are all the way back in the centre of the chair and that knees, and hips are level
- The trunk/torso should be centred
- Check that the feet are flat and directly under the knees and safely placed on the floor or footrest(s)
- Make sure that the affected arm is well supported (i.e. use of pillows or positioning devices as recommended). The arm should be slightly awayfrom the person's side with the hand forward and palm down
- Before you leave, ensure that the person is well supported and comfortable. Do frequent checks to make sure they remain properly positioned

Seek extra support

✓ Occupational Therapists and Physiotherapists are experts in proper sitting and positioning. It may be helpful to involve them in the person's care. There are many options to customize the seating system and help is available

Smart Tips *for* Stroke Care

Meaningful Activity After Stroke

Meaningful activities can provide enjoyment, a sense of purpose and define who a person is. These activities may include engagement in leisure, social, cultural and/or spiritual activities. After a stroke, impairments can make it challenging for a person to engage in meaningful activities. Supporting persons with stroke to participate can help with their recovery and build a sense of belonging.

What you should know

- ✓ An individual is more likely to participate in an activity if it is meaningful/interesting to them
- ✓ Without meaningful experiences, days can feel long and empty, which can lead to social isolation, loneliness and depression
- ✓ Meaningful activities can contribute to improved recovery, including physical fitness, mood and overall well-being

Engaging in meaningful experiences can provide opportunities for:

- socializing and meeting new people, leading to friendship and feeling they belong
- physical activity
- a sense of control over one's life
- a creative outlet
- stress relief
- a sense of accomplishment
- cultural experience
- improved self-confidence
- adjustment to a disability
- structuring a person's day
- enhanced quality of life

Continues on next page.

Smart Tips - Always follow the care plan!

The Five W's and How

Ask questions to determine meaningful activities:

1. **Who** do you like to do activities with?
2. **What** do you like to do?
3. **Where** do you like to do these activities?
4. **When** do you like to do these activities?
5. **Why** do you like to do these activities?
6. **How** do you do these activities?

How you can help

- Choose activities that are meaningful, enjoyable and important to the person; encourage participation
- Support the person with stroke to prepare for their activity – get any assistive devices ready (e.g. hearing aids, glasses, mobility device)
- Think of ways to modify the activity for successful participation (e.g. use card holders, encourage seated exercise, use large print bingo cards/playing cards)
- Find other individuals who have similar interests
- Use strategies to accommodate different levels of ability in communication, cognition, perception, vision, etc.
- Talk to family members, caregivers or friends about the person's interests
- Encourage family members, caregivers or friends to bring in some favourite items (e.g. music, books, games, word searches)
- Adjust food activities if the person with stroke has swallowing difficulties (i.e. dysphagia) to promote inclusion. Talk to a Registered Dietitian and/or Speech Language Pathologist if you have questions. (See Smart Tips for Stroke Care – Eating and Swallowing After Stroke)

Seek extra support

✓ Occupational Therapists and Recreation Therapists are experts in supporting persons with stroke to engage in meaningful activities. It may be helpful to involve them in the person's care - especially if you notice the person is not participating or is becoming isolated

Smart Tips for Stroke Care (2023) was created by members of the Regional Stroke Networks of Ontario.

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Sunnybrook Health Sciences Centre
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Tostroke.com

Toronto West Stroke Network

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