



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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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)

Continues on next page.

Vision and Perception After Stroke



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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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>