

4.3 Body Scheme

There are many considerations that are crucial to promoting safety and optimizing recovery when working with people who have had a stroke. The TACLS Quick Reference Guides were developed from the TACLS resource and can be used as quick reference to help *support healthcare providers* and informal caregivers who may not typically work with and care for people who have had a stroke.

We recommend reviewing the full **TACLS resource** for more complete information:
strokebestpractices.ca/resources/professional-resources/tacsls

Quick reference guide highlights

- **Always follow the current care plan for the person that you are working with.**
- A person who has had a stroke may experience impairments of body scheme. Body scheme is defined as awareness of the:
 - Body parts (on self and others).
 - Position of body parts in relation to each other.
 - Position of body parts in relation to objects in the environment.
- With body scheme impairments, a person might lack understanding and awareness of body parts and the relationship of these parts to each other and the environment.
- Some terms used to describe the components of body scheme impairments include autotopagnosia, somatognosia, anosognosia and right-left discrimination.

Autotopagnosia and somatognosia

- A person who **does not recognize their own body parts** and their **relationship to each other** may **lack an accurate sense of their own body** structure (called **autotopagnosia**).
For example, a person may:
 - Be unable to find their mouth, but can show you the part of the body that they eat with.
 - Be able to carry out daily activities that require use of body parts such as putting on a shirt, but will have difficulty if asked to put an “arm” into their sleeve.
 - Have difficulty using both hands for two-handed activities if asked to do so.
 - Have difficulty following directions that involve use of body parts (e.g., during dressing, bathing, mobility and/or transfers).
- A person may have **difficulty identifying parts of the body on others** (called **somatognosia**).
The person may lack awareness of the body structure and relationship of the body parts on another person. They may have difficulty with:
 - Identifying body parts during personal care and/or following directions that involve use of body parts (e.g., during mobility and/or transfers).
 - Identifying body parts on others and/or they may be able to find a body part on another person but not on themselves.

- Naming a body part, but not say where it is in relation to other body parts (e.g., they can identify the nose, but not know that it is between the eyes).
- Using both hands for two-handed activities if asked.



How you can help

- Reinforce and name the parts of the body during personal care activities (e.g., say “You are doing a good job of washing your left arm”).
- Touch the limb you are referring to, to provide sensory input rather than asking the person to move their arm or leg (e.g., tap/touch their left leg to encourage the movement during a transfer).
- Reinforce the strategies recommended by the occupational therapist (OT) in the care plan during your interactions with the person.

Anosognosia

- Another example of a body scheme disorder is when a person does not recognize or is unaware that they have an impairment, such as their own hemiplegia (called anosognosia). For example, a person may:
 - Deny the presence and/or severity of any impairments such as weakness or paralysis affecting one side of the body (hemiplegia).
 - Lack insight of their functional difficulties and as a result may try to transfer on their own when they should be waiting for help or will try to lift a heavy pot on the stove using their weak arm.
- When a person does not recognize that they have functional difficulties or impairments they may have difficulty: remaining safe as they carry out daily activities; accepting help from others; understanding and believing they have limitations or impairments as a result of their stroke.



How You Can Help

- Encourage independence while emphasizing safety.
- Educate the person on their limitations and show patience, support and repetition when providing care.

Right-Left discrimination

- Another component of body scheme is the ability to differentiate or discriminate between right and left on the body and/or within the environment. This also includes understanding the concepts of “right” and “left”. A person may have difficulty with:
 - Daily activities, due to difficulty following directions if words left and right are used.
 - Dressing, as the person cannot match the right pant leg with the right leg.
 - Mobility, as they cannot respond to “turn left” or “turn right”.
 - Cueing, as they have difficulty responding when you ask them to turn their head left/right.



How you can help

- Follow the OT's recommendations to help the person re-orient to right and left.
- Mark objects with tape or writing to differentiate between right and left.
- Have the person always wear a watch or bracelet on the same wrist to help remember the difference between their right and left sides.
- When giving instructions do not only use the words "right" or "left." Instead, point and touch the body part you are referring to and/or refer to an object by its location. For example:
 - While touching a person's right hand say, "use your right hand to pick up your toothpaste".
 - Say: "the washroom door is just before your bedroom door on the right" instead of "the washroom door is on your right".

Note: This information represents some of the priorities of care related to body scheme; consult with the occupational therapist for any questions or concerns regarding impairments of body scheme.

References:

1. Canadian Stroke Best Practice Recommendations: www.strokebestpractices.ca, **Rehabilitation and Recovery following Stroke**, 6th Edition, Section 8
2. Taking Action for Optimal Community and Long-Term Stroke Care (TACLS) – **Body Scheme**
3. Evidence-Based Review of Stroke Rehabilitation – **Chapter 2 – Clinical Consequences of Stroke**

Taking Action for Optimal Community and Long-Term Stroke Care is for informational and educational purposes only and is not intended to be considered or relied upon as medical advice or a substitute for medical advice, a medical diagnosis or treatment from a physician or qualified healthcare professional. Healthcare providers and other users of this TACLS content are responsible for adhering to their professional college standards of practice, their organizational standards and policies, and for obtaining appropriate medical advice from a physician or other qualified healthcare professional prior to acting upon any information available through this publication.