

Those We Care For

We commonly see patients with communication and swallowing problems related to:

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Neurological Conditions

Speech-Language Pathologists are often involved with people who have sustained sudden or progressive changes to their central nervous system. Conditions such as seizures, brain tumours, Guillain Barré syndrome or those involving neuromuscular, motor neuron, and movement disorders can affect areas of the brain used for swallowing, communicating ideas and forming words. Speech-Language Pathologists can assess, provide support and education and develop therapeutic plans to improve communication or swallow skills.

Neurosurgical Conditions

A number of conditions such as, tumours, aneurysms, brain hemorrhages, epilepsy and trauma to the head or spine may require neurosurgical intervention. The Speech-Language Pathologist may begin an assessment before surgery occurs to better understand how swallowing and communication might be affected during the early and later stages of recovery. The Speech-Language Pathologist may follow these patients after neurosurgical intervention to determine impact of surgery on swallowing and communication and to provide support and education to the patient and their family, and develop a therapeutic plan to help with recovery.

Helpful Resources:

- [Brain Tumour Foundation of Canada](#)
- [Clinical Neurological Sciences at LHSC/UWO](#)

Traumatic Brain Injury

If a person sustains injury to the brain as a result of a motor vehicle collision or fall, a Speech-Language Pathologist becomes involved early in the admission even in cases where responsiveness is minimal. A program called coma stimulation/sensory awareness can be initiated by the Speech-Language Pathologist if deemed appropriate. As a person's level of responsiveness improves, a cognitive communication assessment as well as an evaluation of swallowing function will be completed.

Following a head injury, even subtle changes in cognitive communication can have an impact on an individual's function at work and at home. Some individuals will require admission to a rehabilitation facility while others may receive ongoing services through the trauma clinic and in the community.

Helpful Resources:

- [Brain Injury Association of London and Region](#)
- [Ontario Brain Injury Association](#)
- [Trauma Program at LHSC](#)

Stroke

A stroke can have devastating effects on a person's ability to understand, speak, read, write or even swallow. The types of deficits following a stroke depend on the area of the brain that has been injured. Individuals are often left with muscle weakness on one side of the body, and this can include face, tongue and mouth muscles that are used for speaking and swallowing. Assessments are completed to establish initial treatment goals and to assist with discharge planning.

LHSC's University Hospital is the Regional Stroke Centre of Southwestern Ontario. It is 1 of 41 hospitals in the province with a designated stroke unit, and 1 of 11 providing access to specialized acute stroke interventions.

Helpful Resources:

- [Aphasia Friendly Canada](#)
- [Aphasia Institute](#)
- [Canadian Stroke](#)
- [Canadian Stroke Best Practices](#)
- [Canadian Stroke Network](#)
- [Clinical Neurological Sciences at LHSC/UWO](#)
- [Heart and Stroke Foundation](#)
- [LHSC Regional Stroke Centre](#)
- [Southwestern Ontario Stroke Network](#)

Motor Neuron Diseases

The motor neuron diseases (MND) are a group of neurological disorders that affect the cells that control voluntary muscle activity including speaking, walking, breathing, swallowing. One common motor neuron disease is Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's disease. As part of the interdisciplinary team for the Motor Neuron Diseases Clinic, the Speech-Language Pathologist helps these patients manage any speech or swallowing deficits.

Helpful Resources:

- [The ALS Society of Canada](#)
- [International Alliance of ALS/MND Association](#)

[Movement Disorders](#)

Movement disorders are neurological conditions that affect an individual's speed, fluency, quality, and ease of movement. Some common movement disorders include Parkinson's disease, Huntington's disease, ataxia, Progressive Supranuclear Palsy, dystonia and Multiple Systems Atrophy. Speech-Language Pathologists are consulted by the Movement Disorder specialists in the Movement Disorders Clinic when speech and swallowing are impacted by the disorder. Service can be provided during an existing appointment to the clinic or during a separate outpatient appointment in the Speech-Language Pathology department.

Helpful Resources:

- [Canadian Movement Disorder Group](#)
- [Dystonia Medical Research Foundation Canada](#)
- [International Parkinson and Movement Disorder Society](#)
- [Multiple System Atrophy Coalition](#)
- [Multiple System Atrophy Trust](#)
- [Parkinson Society of Southwestern Ontario](#)
- [Progressive Supranuclear Palsy Society of Canada](#)

[Neuromuscular Disorders](#)

Muscle and nerve diseases, such as Myasthenia Gravis, Muscular Dystrophy, and Myopathy, can result in weakened throat, face, mouth and tongue muscles. This can affect a person's ability to chew and swallow food, as well as speak.

Speech-Language Pathologists are consulted by the Neurologists in the Neuromuscular Clinic. These patients often receive continuous outpatient management, in the form of ongoing assessment, management and education regarding their speech and swallowing difficulties.

Helpful Resources:

- [Muscular Dystrophy Canada](#)
- [Myasthenia Gravis Coalition of Canada](#)
- [Myasthenia Gravis Foundation of America, Inc.](#)

[Multiple Sclerosis](#)

Different parts of the body are affected in Multiple Sclerosis (MS), depending on the type and severity of the disease. When muscles involving speech and swallowing are affected, patients are seen on an on-going basis by the Speech-Language Pathologist. Patients are referred to the Speech-Language Pathology service through the MS Clinic. The goals are to provide assessment and management of communication as well as to maintain safe and adequate nutrition.

Helpful Resources:

- [Multiple Sclerosis Clinic at LHSC](#)
- [Multiple Sclerosis Society of Canada](#)

[Epilepsy](#)

Abnormal electrical activity in the brain can cause seizures and a condition known as epilepsy. There are many causes of epilepsy and different patterns of seizures. When the language areas of the brain are affected by epilepsy, some problems with communicating ideas can be found. Speech-Language Pathologists evaluate listening, speaking, reading and writing to determine how these skills and what language areas of the brain might be affected.

Helpful Resources:

- [Epilepsy Ontario](#)
- [Epilepsy Support Centre](#)
- [LHSC Epilepsy Program](#)

[Dementia](#)

Dementia is not a specific disease, but a group of symptoms caused by a number of different disorders that affect the brain. People with dementia may experience difficulties remembering things, performing every day activities, interacting with others, as well as controlling emotions. These individuals may also experience personality changes. Speech-Language Pathologists often provide education about the disease process and the changes an individual may experience once dementia is suspected. We also make recommendations to aid individuals and family members with communication and/or to maximize the safety of the individual during meals.

Helpful Resources:

- [Alzheimer's Disease and Related Dementias – National Institute on Aging](#)
- [Alzheimer Society Ontario](#)
- [Alzheimer's Society – Southwest Partners](#)

[Complications of Acute Illness](#)

Speech-Language Pathologists often work with individuals who have swallowing and communication difficulties caused by extended and severe illness that results in prolonged fatigue, decreased endurance and muscle weakness including the mechanisms used for swallowing and speech.

Those who are admitted to hospital with severe breathing impairments may undergo intubations or tracheotomy. These medical procedures involve significant manipulation of an individual's mouth, neck, or throat and these patients may experience speaking and swallowing difficulties as a result.

The video below highlights the Speech-Language Pathologist's role in helping patients communicate in the critical care setting using an Alternative and Augmentative Communication (AAC) device.

[Impact of AAC on patient communication and well being](#)

Helpful Resources:

- [Critical Care Trauma Centre at LHSC](#)
- [Emergency Medicine at LHSC](#)
- [Intensive Care at LHSC](#)
- [Medical-Surgical Intensive Care Unit at LHSC](#)
- [Trauma Program at LHSC](#)

Head and Neck Cancer

Individuals with head and neck cancer may undergo various treatments including surgery, radiation, chemotherapy or a combination of these approaches. Head and neck cancer, and its treatment, can cause communication and/or swallowing challenges. Speech-Language Pathologists work with patients and their caregivers prior to, during, and following treatment to provide education, conduct assessment, and provide intervention for a variety of speech, voice, and/or swallowing challenges. S-LPs may also introduce alternative methods of communication if needed.

One of the types of head and neck surgery involves removing the voice box or larynx, called a laryngectomy. For these patients, part of the post-operative care includes the alaryngeal voice restoration program, which allows us to help develop electrolaryngeal speech, tracheoesophageal speech, and esophageal speech.

Helpful Resources:

- [London Regional Cancer Program](#)
- [Medline Plus - Head and Neck Cancer](#)
- [National Cancer Institute - Head and Neck Cancer](#)

Laryngeal Disorders

Individuals who have experienced trauma or pathology to the larynx may require assessment and treatment of the voice. Speech Language Pathologists are able to evaluate various parameters of your voice and are able to provide recommendations on how to use your voice.

A physician may also consider referring you to Laryngeal Endoscopy and Vocal Function Clinic. This multidisciplinary clinic is a collaboration between a physician and the Speech Language Pathology service. Videostroboscopy is completed and a video sample of the vocal cords moving is taken. An assessment of how the voice is used is also completed and recommendations for further management are made.

Speech Language Pathologists also collaborate with the Otolaryngology Head and Neck Surgery Program in the Spasmodic Dysphonia Clinic. Individuals with Spasmodic Dysphonia, a movement disorder of the vocal folds, is seen for assessment and treatment.

Helpful Resources:

- [Medline Plus - Voice Disorders](#)
- [Texas Voice Center](#)

- [The Voice Foundation](#)

[Ortho Spine Disorders](#)

The Speech-Language Pathologist (S-LP) may see patients with orthopedic cervical spine disorders and those undergoing elective and emergency operations. The nature of the disorder may vary and could be due to tumour, degenerative disease, infectious pathology, or trauma. Surgical decompressive and reconstructive techniques in the cervical spine may lead to swallowing difficulties post-operatively. The S-LP will complete a bedside clinical swallowing assessment, with potential instrumental assessment, in addition to help manage swallowing concerns and deficits.

Helpful Resources:

- [Spinal Cord Injury Information – LHSC Trauma Program](#)
- [Resources: Cervical Spinal Surgery \(ACDF\) and Dysphagia - Melbourne Swallow Analysis Centre](#)

[Palliative Care](#)

Palliative care is directed toward pain and symptom management and improving quality of life for those individuals living with serious illnesses. Palliative care has a very interdisciplinary focus, concentrating on physical, psychological, and spiritual well-being. The Speech-Language Pathologist can complete swallowing and communication assessments and provide recommendations to reduce discomfort and support quality of life.

Helpful Resources:

- [Hospice Palliative Care Ontario](#)
- [LHSC Family Medicine/Palliative Care Program](#)
- [LRCP Palliative Care at LHSC](#)