



## Brain Injury Related Services

# SPEECH & LANGUAGE PATHOLOGY



WHO

**Speech-language pathologists (SLPs)** are healthcare professionals who diagnose and treat communication disorders. SLPs have either a master's degree in speech-language pathology or communication science disorders or doctoral degree in speech-language pathology.

### SLPs diagnose and treat

- **Speech Disorder** – difficult to produce speech known as dysarthria/apraxia
- **Language Disorder** – difficulty understanding spoken or written language or sharing feelings, thoughts and ideas, also known as aphasia
- **Social Communication** – difficulty using verbal and non-verbal communication appropriately when communicating socially
- **Cognitive Communication** – difficulty with organizing thoughts, cognition, memory, planning and problem solving
- **Swallowing Disorders** – difficulties swallowing known as dysphagia

WHAT

### Outcomes of Speech-Language Therapy

Improve memory, attention, problem solving and organization

Better express thoughts and emotions

Develop language comprehension and social skills

Improve speech articulation and swallowing safety

WHEN

### SLPs are present in all stages of recovery

#### ■ Early stage (coma)

- Patient response to sensory stimulation
- Teach others how to interact with patient

#### ■ When patient is aware

- Maintain attention
- Help reduce confusion
- Help patient become oriented to date, where they are, and what happened

#### ■ Late recovery/long term

- Work on improving memory and cognition
- Work on problem solving, planning and organizing
- Develop social skills

All parts of the brain can be affected by injury, but the frontal and temporal lobe are most commonly associated with memory, speech and language, hearing, and organization.

### Frontal lobe

- Responsibilities
  - Planning & organizing
  - Problem solving & decision making
  - Memory & attention
  - Behavior, emotions, & impulse control
  - Speech & language

### Temporal lobe

- Responsibilities
  - Recognize & process sound
  - Produce & understand speech
  - Memory
- Post injury effects
  - Hearing difficulty/loss
  - Language problems



Working with a SLP begins with evaluating and testing to identify the patient's needs. Once the patient's needs are determined, a plan for treatment can be made.

SLP treatment is usually a combination of restorative and compensatory therapy

- **Restorative** – retraining to restore or improve function
- **Compensatory** – learn to adapt to a new way of doing things when a function is lost. Can include accommodations or modifications

To find a provider near you go to NDBIN's Resource Directory  
<https://www.ndbin.org/resource-directory>



NORTH DAKOTA  
 BRAIN INJURY  
 NETWORK