

## Traumatic Brain Injury (TBI)

**What is TBI?** TBI is a sudden physical damage to the brain.

**What Causes TBI?** Motor vehicle accidents cause most TBIs. Other injuries result from falls, sports injuries, violent crimes, and child abuse.

**What communication problems result from TBI?**

### Language deficits

- Difficulty with word-finding
- Poor sentence construction
- Lengthy or incorrect explanations
- Poor understanding of humor and figurative language
- Little awareness of errors
- Difficulty understanding written and spoken language
- Poor spelling, writing, and reading skills
- Difficulty using social language effectively

### Speech deficits

- Poor coordination of the speech muscles (e.g., lips, tongue)
- Weak speech muscles
- Reduced coordination of breathing and talking
- Poor breath support for speech
- In severe cases, inability to speak
- Slow and/or slurred speech
- Poor intonation

### Speech-Language Pathologists (SLP's) and TBI

The SLP collaborates with other rehabilitation professionals and families to develop an evaluation and treatment plan. At the time of initial evaluation, the SLP will gather case history information and assess speech, language, cognitive, and social skills. The patient may be referred to other professionals, such as respiratory therapists or SLPs who specialize in swallowing disorders for additional information. After an evaluation, the SLP develops a treatment program.

Treatment programs vary and depend on evaluation results, prognosis, and functional communication needs of the patient. In the early stages of rehabilitation, therapy focuses on eliciting a communicative response from the patient. The SLP can help orient the patient to his/her environment (e.g., time of day, location, etc.). As the patient progresses, treatment may focus on any of the following goals depending on the needs of the patient:

- Using alternative/augmentative communication devices (AAC) effectively. AAC may consist of computerized devices or simple picture boards.
- Improving memory for daily tasks, organizational skills, problem solving, and reasoning.
- Maximizing speech intelligibility through sound production practice and/or oral-motor exercises for the speech muscles.
- Improving coordination of breathing and speech.
- Using intonation to enhance speech intelligibility.
- Increasing social language skills (e.g., taking turns in conversation, topic maintenance, etc.).
- Improving the patient's ability to use vocabulary and sentence structure effectively to communicate wants, needs, and ideas.

The Center for Hearing & Speech provides Speech/Language evaluations and therapy programs for individuals of all ages. Please call 314.968.4710 for more information. Financial assistance is available.