



## **SEVERE SPEECH DISORDERS: COMMON CAUSES**

### **Amyotrophic Lateral Sclerosis (ALS)**

Commonly known as Lou Gehrig's disease, it is a fatal disease that attacks the nerve cells and pathways on the brain and spinal cord. As the nerve cells die, patients progressively lose muscle control and movement, as well as vital functions such as speech and swallowing, generally followed later by breathing. Mental faculties typically are not affected. ALS occurs in two out of every 100,000 people, its causes are unknown. <sup>1</sup>

### **Autism**

A neurological disorder that occurs in varying degrees and types, Autism severely affects the patient's ability to socially interact, communicate and relate to the outside world. The definitive cause is unknown, although it is thought to be a genetic disorder. An estimated 1.5 million Americans have some form of autism. <sup>2</sup>

### **Traumatic Brain Injury**

A general term used to describe damage to the brain due to impact, internal damage or loss of oxygen. Causes include Shaken Baby Syndrome, penetrative brain injuries (i.e., gunshot), stroke and carbon monoxide poisoning. Approximately 1.5 million Americans sustain traumatic brain injuries every year. <sup>3</sup>

### **Cerebral Palsy**

A broad term used to describe a group of chronic disorders that affect body movement and muscle coordination. Cerebral palsy is caused by damage to one or more areas of the brain and does not worsen over time. Approximately 764,000 Americans are thought to have some form of cerebral palsy. <sup>4</sup>

### **Down Syndrome**

Caused by a chromosomal abnormality, Down Syndrome is characterized by slow physical development, physiological abnormalities and, generally, cognitive disabilities. Down Syndrome is thought to occur in one out of every 800 to 1,000 live births. <sup>5</sup>

### **Mental Retardation**

Mental retardation is a disability characterized by significant limitations in intellectual functioning and in adaptive behavior as expressed in conceptual, social and practical adaptive skills. This disability

originates before age 18. Prevalent in three out of every 100 people, it is caused by a variety of factors including genetic conditions, complications during pregnancy and birth and health problems. <sup>6</sup>

### **Muscular Dystrophy (MD)**

A group of rare inherited muscle diseases in which muscle fibers are unusually susceptible to damage. There are nine major types of muscular dystrophy. There is no cure for the disease, but medical therapies can slow the progression of the disease. The various types of the disease affect more than 50,000 Americans. <sup>7</sup>

### **Parkinson's Disease**

A chronic and progressive movement disorder. Symptoms include tremors in the limbs, rigidity of the body, slowness in movement and postural instability. While its cause is unknown, it is believed to be the result of a combination of genetics and unknown environmental triggers. Parkinson's Disease occurs in approximately one out of every 200 people, but more commonly affects people over the age of 50. <sup>8</sup>

### **References:**

1 Facts You Should Know About ALS (2005). ALS Association. Retrieved in April 2005 from <http://www.alsa.org>

2 What is Autism? (2005). Autism Society. Retrieved in April 2005 from <http://www.autism-society.org/site/PageServer?pagename=whatisautism>

3 What is Brain Injury? (2005). Brain Injury Association of America. Retrieved in April 2005 from [http://www.biausa.org/Pages/what\\_is\\_brain\\_injury.html](http://www.biausa.org/Pages/what_is_brain_injury.html).

4 Cerebral Palsy – Facts and Figures (2005). Retrieved in April 2005 from [http://www.ucp.org/ucp\\_generaldoc.cfm/1/9/37/37-37/447](http://www.ucp.org/ucp_generaldoc.cfm/1/9/37/37-37/447).

5 National Down Syndrome Society: General Info (2005). National Down Syndrome Society. Retrieved in April 2005 from <http://www.ndss.org/content.cfm?fuseaction=InfoRes.General>.

6 Definition of Mental Retardation Fact Sheet (2005). American Association of Mental Retardation, Retrieved in April 2005 from <http://www.aamr.org/>.

7 Muscular Dystrophy (2005). MayoClinic.com. Retrieved in April 2005 from <http://www.mayoclinic.com/invoke.cfm?id=DS00200>.

8 Parkinson's Disease: An Overview (2005), Parkinson's Disease Foundation, Inc. Retrieved in April 2005 from <http://www.pdf.org/AboutPD/index.cfm>.

**Media Contact:** Joanne Kaufmann, 412-222-7952, [joanne.kaufmann@dynavoxtech.com](mailto:joanne.kaufmann@dynavoxtech.com)