



DEVELOPMENTAL DISABILITIES

Signal Centers, Inc. Adult Services

Purpose

The purpose of this presentation is to give exposure to the different types of developmental disabilities and how to properly interact with them.

The information from this training will be of most help to you especially if you are a manager or supervisor and you have employees who have developmental disabilities.



DEVELOPMENTAL DISABILITIES ARE A GROUP OF CONDITIONS DUE TO AN IMPAIRMENT IN PHYSICAL, LEARNING, LANGUAGE, OR BEHAVIOR AREAS. THESE CONDITIONS BEGIN DURING THE DEVELOPMENTAL PERIOD, MAY IMPACT DAY-TO-DAY FUNCTIONING, AND USUALLY LAST THROUGHOUT A PERSON'S LIFETIME.



DEVELOPMENTAL DISABILITIES BEGIN ANYTIME DURING THE DEVELOPMENTAL PERIOD AND USUALLY LAST THROUGHOUT A PERSON'S LIFETIME. MOST DEVELOPMENTAL DISABILITIES BEGIN BEFORE A BABY IS BORN, BUT SOME CAN HAPPEN AFTER BIRTH BECAUSE OF INJURY, INFECTION, OR OTHER FACTORS.



MOST DEVELOPMENTAL DISABILITIES ARE THOUGHT TO BE CAUSED BY A COMPLEX MIX OF FACTORS. THESE FACTORS INCLUDE GENETICS; PARENTAL HEALTH AND BEHAVIORS (SUCH AS SMOKING AND DRINKING) DURING PREGNANCY; COMPLICATIONS DURING BIRTH; INFECTIONS THE MOTHER MIGHT HAVE DURING PREGNANCY OR THE BABY MIGHT HAVE VERY EARLY IN LIFE; AND EXPOSURE OF THE MOTHER OR CHILD TO HIGH LEVELS OF ENVIRONMENTAL TOXINS, SUCH AS LEAD. FOR SOME DEVELOPMENTAL DISABILITIES, SUCH AS FETAL ALCOHOL SYNDROME, WHICH IS CAUSED BY DRINKING ALCOHOL DURING PREGNANCY, WE KNOW

Facts About Developmental Disabilities

Most Common Types of Developmental Disabilities

- Some of the most common types of developmental disabilities include:
 - *Intellectual Disability*
 - *Cerebral Palsy*
 - *Down Syndrome*
 - *Hearing Loss*
 - *Vision Impairment*
 - *Autism Spectrum Disorder*
 - *Tourette Syndrome*
 - *Language and Speech Disorders*

INTELLECTUAL DISABILITY



Intellectual Disability

What is an intellectual disability?

Intellectual disability is a disability characterized by significant limitations both in **intellectual functioning** (reasoning, learning, problem solving) and in **adaptive behavior**, which covers a range of everyday social and practical skills. This disability originates before the age of 18.



Is intellectual disability the same as *mental retardation*? Why do some programs and regulations still say *mental retardation*?

The term intellectual disability covers the same population of individuals who were diagnosed previously with mental retardation in number, kind, level, type, duration of disability, and the need of people with this disability for individualized services and supports. Furthermore, every individual who is or was eligible for a diagnosis of mental retardation is eligible for a diagnosis of intellectual disability. While intellectual disability is the preferred term, it takes time for language that is used in legislation, regulation, and even for the names of organizations, to change.

Intellectual Disabilities (Cont'd)

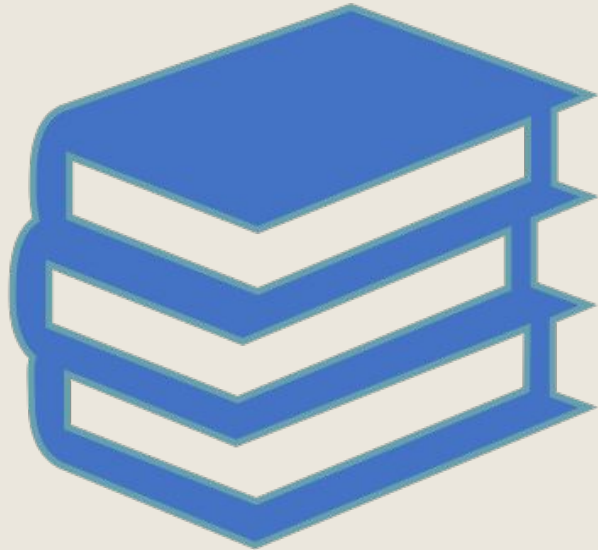
■ Is intellectual disability the same as *developmental disabilities*?

- "Developmental Disabilities" is an umbrella term that includes intellectual disability but also includes other disabilities that are apparent during childhood. Developmental disabilities are severe chronic disabilities that can be cognitive or physical or both. The disabilities appear before the age of 22 and are likely to be lifelong. Some developmental disabilities are largely physical issues, such as cerebral palsy or epilepsy. Some individuals may have a condition that includes a physical and intellectual disability, for example Down syndrome or fetal alcohol syndrome. Intellectual disability encompasses the "cognitive" part of this definition, that is, a disability that is broadly related to thought processes. Because intellectual and other developmental disabilities often co-occur, intellectual disability professionals often work with people who have both types of disabilities.

■ What causes intellectual disability?

- There are a number of causes. Our understanding of the causes of intellectual disability focuses on the types of risk factors (biomedical, social, behavioral, and educational) and the timing of exposure (prenatal, perinatal, and postnatal) to those factors.

Intellectual Disabilities (Cont'd)



- **Is intellectual disability determined by just an IQ test?**
 - No. The evaluation and classification intellectual disability is a complex issue. There are three major criteria for intellectual disability: significant limitations in **intellectual functioning**, significant limitations in **adaptive behavior**, and onset **before the age of 18**. The IQ test is a major tool in measuring *intellectual functioning*, which is the mental capacity for learning, reasoning, problem solving, and so on. A test score below or around 70—or as high as 75—indicates a limitation in intellectual functioning.
 - Other tests determine limitations in *adaptive behavior*, which covers three types of skills:
 - Conceptual skills—language and literacy; money, time, and number concepts; and self-direction.
 - Social skills—interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules, obey laws, and avoid being victimized.
 - Practical skills—activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of the telephone.

DEAFNESS



Deafness



Hearing impairment, deafness, or hearing loss refers to the total or partial inability to hear sounds.



Symptoms may be mild, moderate, severe, or profound. A patient with a mild hearing impairment may have problems understanding speech, especially if there is a lot of noise around, while those with moderate deafness may need a hearing aid.

Mild deafness or mild hearing impairment: The person can only detect sounds between 25 and 29 decibels (dB). They may find it hard to understand the words other people are saying, especially if there is a lot of background noise.

Moderate deafness or moderate hearing impairment: The person can only detect sounds between 40 and 69 dB. Following a conversation using hearing alone is very difficult without using a hearing aid.

Severe deafness: The person only hears sounds above 70 to 89 dB. A severely deaf person must either lip-read or use sign language in order to communicate, even if they have a hearing aid.

Profound deafness: Anybody who cannot hear a sound below 90dB has profound deafness. Some people with profound deafness cannot hear anything at all, at any decibel level. Communication is carried out using sign language, lip-reading, or reading and writing.

Levels of Deafness

Deafness (Causes)

Chicken pox

Cytomegalovirus

mumps

Meningitis

sickle cell disease

Syphilis

Lyme disease

Diabetes

a treatment for tuberculosis (TB), streptomycin, that is believed to be a key risk factor

Hypothyroidism

Arthritis

some cancers

teenagers exposed to second-hand smoke

Hearing Loss (Recommendations)

Ask the person who is hard of hearing, deaf, or deaf-blind how he or she prefers to communicate and eliminate or minimize background noise and distractions.

If the person uses an assistive hearing device (hearing aid), ensure that it is readily available to the person and in working order and that he or she uses it.

If you are speaking through a sign language interpreter, pause occasionally to allow the interpreter time to translate completely and accurately.

Talk directly to the person who is assisted by a sign interpreter, not to the interpreter, even if the person is looking at the interpreter and does not make eye contact with you.

Before you start to speak, get the attention of the person you are addressing. Visual (wave) or tactile signals (light touch) can be used to get the person's attention.

Speak without exaggerating your words. Do not raise your voice, unless you are specifically requested to do so. Speak in a normal tone without shouting.

If the person lip reads (speech reads), face the person and keep your hands and other objects away from your mouth. Maintain eye contact. Do not turn away or walk around while talking.

Consider that written English may not be the primary language for some people with disabilities and make appropriate accommodations in communicating with them.

Anticipate that only 30% of lip reading (speech reading) will be understood because of its level of difficulty; be prepared to repeat information or questions.

Ask the person for feedback or to repeat what you have said to assess understanding.

If you do not understand something that is said, ask the person to repeat it or to write it down. Do not pretend to understand if you do not.



VISION IMPAIRMENT

What is Vision Impairment



VISUAL IMPAIRMENT (VISION IMPAIRMENT, VISION DISABILITY) IS DEFINED AS A DECREASED ABILITY TO SEE TO A DEGREE THAT CAUSES PROBLEMS NOT FIXABLE BY USUAL MEANS, SUCH AS GLASSES OR MEDICATION. VISUAL IMPAIRMENT CAN BE DUE TO DISEASE, TRAUMA, OR CONGENITAL OR DEGENERATIVE CONDITIONS. IN THE UNITED STATES, THE TERMS "PARTIALLY SIGHTED", "LOW VISION", "LEGALLY BLIND" AND "TOTALLY BLIND" ARE USED BY SCHOOLS, COLLEGES, AND OTHER EDUCATIONAL INSTITUTIONS TO DESCRIBE STUDENTS WITH VISUAL IMPAIRMENTS.



EYE DISORDERS WHICH CAN LEAD TO VISUAL IMPAIRMENTS CAN INCLUDE RETINAL DEGENERATION, ALBINISM, CATARACTS, GLAUCOMA, MUSCULAR PROBLEMS THAT RESULT IN VISUAL DISTURBANCES, CORNEAL DISORDERS, DIABETIC RETINOPATHY, CONGENITAL DISORDERS, AND INFECTION." VISUAL IMPAIRMENT CAN ALSO BE CAUSED BY BRAIN AND NERVE DISORDERS, IN WHICH CASE IT IS USUALLY TERMED CORTICAL VISUAL IMPAIRMENT (CVI).



VARIOUS CONDITIONS REQUIRE ONLY EYEGASSES OR CONTACT LENSES IN ORDER TO CORRECT THE PERSON'S VISION. OTHER CONDITIONS MAY REQUIRE SURGERY.

Vision Impairment (Recommendations)



Identify yourself when you approach a person who has low vision or blindness. Introduce anyone with you to the person with vision loss.



If the person uses glasses, ensure that they are readily available to the person and that he or she uses them.



Touch the person's arm lightly when you speak so that he or she knows to whom you are speaking before you begin.



Face the person and speak directly to him or her. Use a normal tone of voice (avoid shouting).



Explain when you are leaving the environment.



When offering directions, be as specific, i.e., "Left about 10 feet" or "Right two yards." Use clock cues, if the person is accustomed to using this approach: "The door is at 10 o'clock."



When you offer to assist someone with vision loss, allow the person to take your arm. When assisting the person to a chair, place the person's hand on the back or arm of the seat.



Never pet or otherwise distract a canine companion or service animal unless the owner has given you permission to do so.

AUTISM SPECTRUM DISORDER



Autism Spectrum Disorder

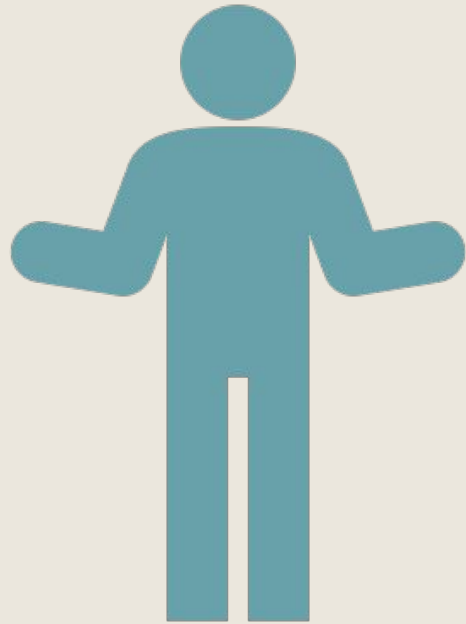
- Autism spectrum disorder (ASD) is a developmental disorder that affects communication and behavior. Although autism can be diagnosed at any age, it is said to be a “developmental disorder” because symptoms generally appear in the first two years of life.
- According to the [Diagnostic and Statistical Manual of Mental Disorders \(DSM-5\)](#), a guide created by the American Psychiatric Association used to diagnose mental disorders, people with ASD have:
 - Difficulty with communication and interaction with other people
 - Restricted interests and repetitive behaviors
 - Symptoms that hurt the person’s ability to function properly in school, work, and other areas of life

Autism Spectrum Disorder (cont'd)

- Autism is known as a “spectrum” disorder because there is wide variation in the type and severity of symptoms people experience. ASD occurs in all ethnic, racial, and economic groups. Although ASD can be a lifelong disorder, treatments and services can improve a person’s symptoms and ability to function. The [American Academy of Pediatrics](#) recommends that all children be screened for autism. All caregivers should talk to their doctor about ASD screening or evaluation.

Autism Spectrum Disorder – Causes and Risk Factors

- While scientists don't know the exact causes of ASD, research suggests that genes can act together with influences from the environment to affect development in ways that lead to ASD. Although scientists are still trying to understand why some people develop ASD and others don't, some risk factors include:
 - Having a sibling with ASD
 - Having older parents
 - Having certain genetic conditions—people with conditions such as Down syndrome, fragile X syndrome, and Rett syndrome are more likely than others to have ASD
 - Very low birth weight



Autism Spectrum Disorder – Signs and Symptoms

- Social communication / interaction behaviors may include:
 - Making little or inconsistent eye contact
 - Tending not to look at or listen to people
 - Rarely sharing enjoyment of objects or activities by pointing or showing things to others
 - Failing to, or being slow to, respond to someone calling their name or to other verbal attempts to gain attention
 - Having difficulties with the back and forth of conversation
 - Often talking at length about a favorite subject without noticing that others are not interested or without giving others a chance to respond
 - Having facial expressions, movements, and gestures that do not match what is being said
 - Having an unusual tone of voice that may sound sing-song or flat and robot-like
 - Having trouble understanding another person's point of view or being unable to predict or understand other people's actions

Autism Spectrum Disorder – Signs and Symptoms (cont'd)

- Restrictive / repetitive behaviors may include:
 - Repeating certain behaviors or having unusual behaviors. For example, repeating words or phrases, a behavior called *echolalia*
 - Having a lasting intense interest in certain topics, such as numbers, details, or facts
 - Having overly focused interests, such as with moving objects or parts of objects
 - Getting upset by slight changes in a routine
 - Being more or less sensitive than other people to sensory input, such as light, noise, clothing, or temperature

Autism Spectrum Disorder – Strengths

- People with ASD may also experience sleep problems and irritability. Although people with ASD experience many challenges, they may also have many strengths, including:
 - Being able to learn things in detail and remember information for long periods of time
 - Being strong visual and auditory learners
 - Excelling in math, science, music, or art

Autism Spectrum Disorder – Tips and Recommendations



Address him or her as you would any other adult, not a child.



Avoid using words or phrases that are too familiar or personal.
“sweetie”, or “cutie”



Say what you mean.



Take time to listen.



If you ask a question, wait for a response.



Provide meaningful feedback.

Be willing to provide feedback if the conversation becomes inappropriate.



Don't speak as if the person is not in the room.

TOURETTE SYNDROME



Tourette Syndrome

Tourette (too-RET) syndrome is a disorder that involves repetitive movements or unwanted sounds (tics) that can't be easily controlled. For instance, you might repeatedly blink your eyes, shrug your shoulders or blurt out unusual sounds or offensive words.

Tics typically show up between ages 2 and 15, with the average being around 6 years of age. Males are about three to four times more likely than females to develop Tourette syndrome.

Although there's no cure for Tourette syndrome, treatments are available. Many people with Tourette syndrome don't need treatment when symptoms aren't troublesome. Tics often lessen or become controlled after the teen years.

Tourette Syndrome (Symptoms)

Tics – sudden, brief, intermittent movements or sounds – are the hallmark sign of Tourette syndrome. They can range from mild to severe. Severe symptoms might significantly interfere with communication, daily functioning and quality of life.

Tics are classified as:

Tics can also involve movement (motor tics) or sounds (vocal tics). Motor tics usually begin before vocal tics do. But the spectrum of tics that people experience is diverse.

Simple tics. These sudden, brief and repetitive tics involve a limited number of muscle groups.

Complex tics. These distinct, coordinated patterns of movements involve several muscle groups.

Common motor tics seen in Tourette syndrome

Simple tics	Complex tics
Eye blinking	Touching or smelling objects
Head jerking	Repeating observed movements
Shoulder shrugging	Stepping in a certain pattern
Eye darting	Obscene gesturing
Nose twitching	Bending or twisting
Mouth movements	Hopping

VOCAL TICS SEEN IN TOURETT E SYNDROM E

Simple tics

Grunting

Coughing

Throat clearing

Barking

Complex tics

Repeating one's own words or phrases

Repeating others' words or phrases

Using vulgar, obscene or swear words

Tourette Syndrome (cont'd)

- In addition, tics can:
 - *Vary in type, frequency and severity*
 - *Worsen if you're ill, stressed, anxious, tired or excited*
 - *Occur during sleep*
 - *Change over time*
 - *Worsen in the early teenage years and improve during the transition into adulthood*

Tourette Syndrome (Risk Factors)

- Risk factors for Tourette syndrome include:
 - **Family history.** Having a family history of Tourette syndrome or other tic disorders might increase the risk of developing Tourette syndrome.
 - **Sex.** Males are about three to four times more likely than females to develop Tourette syndrome.

Tourette Syndrome (Complications)

- Conditions often associated with Tourette syndrome include:
 - *Attention-deficit/hyperactivity disorder (ADHD)*
 - *Obsessive-compulsive disorder (OCD)*
 - *Autism spectrum disorder*
 - *Learning disabilities*
 - *Sleep disorders*
 - *Depression*
 - *Anxiety disorders*
 - *Pain related to tics, especially headaches*
 - *Anger-management problems*

LANGUAGE AND SPEECH DISORDERS





Language and Speech Disorders

- **Speech** is how we say sounds and words. People with speech problems may:
 - *not say sounds clearly*
 - *have a hoarse or raspy voice*
 - *repeat sounds or pause when speaking, called stuttering*
- **Language** is the words we use to share ideas and get what we want. A person with a language disorder may have problems:
 - *understanding*
 - *talking*
 - *reading*
 - *writing*
- Children and adults can have speech and language disorders.

Most Common Types of Speech Disorders

Apraxia of Speech (AOS)

Stuttering - Stammering

Dysarthria

Lisping

Spasmodic Dysphonia

Cluttering

Muteness – Selective Mutism

Aphasia

Speech Delay – Alalia

Apraxia of Speech (AOS)

1

Apraxia of Speech (AOS) happens when the neural pathway between the brain and a person's speech function (speech muscles) is lost or obscured. The person knows what they want to say – they can even write what they want to say on paper – however the brain is unable to send the correct messages so that speech muscles can articulate what they want to say, even though the speech muscles themselves work just fine.

2

There are different levels of severity of AOS, ranging from mostly functional, to speech that is incoherent. And right now we know for certain it can be caused by brain damage, such as in an adult who has a stroke. This is called Acquired AOS.

3

However the scientific and medical community has been unable to detect brain damage – or even differences – in children who are born with this disorder, making the causes of Childhood AOS somewhat of a mystery. There is often a correlation present, with close family members suffering from learning or communication disorders, suggesting there may be a genetic link.

4

Mild cases might be harder to diagnose, especially in children where multiple unknown speech disorders may be present. Symptoms of mild forms of AOS are shared by a range of different speech disorders, and include mispronunciation of words and irregularities in tone, rhythm, or emphasis (prosody).

5

Severe cases are more easily diagnosed, with symptoms including inability to articulate words, groping for sound positions, off-target movements that distort sounds, and inconsistency in pronunciation.



Stuttering - Stammering

Stuttering, also referred to as stammering, is so common that everyone knows what it sounds like and can easily recognize it. Everyone has probably had moments of stuttering at least once in their life. The National Institute on Deafness and Other Communication Disorders estimates that three million Americans stutter, and reports that of the up-to-10-percent of children who do stutter, three-quarters of them will outgrow it. It should not be confused with cluttering.

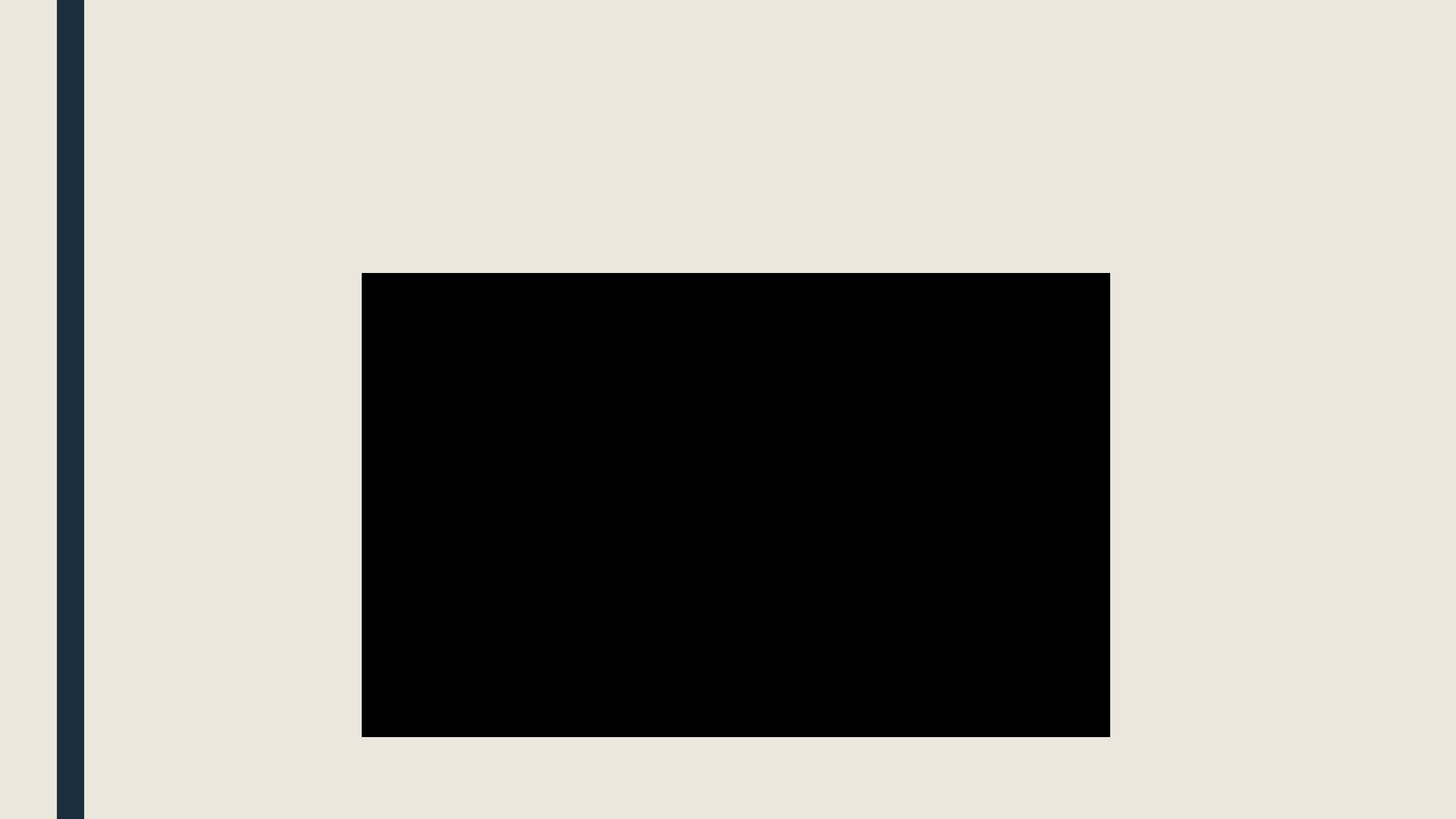
Most people don't know that stuttering can also include non-verbal involuntary or semi-voluntary actions like blinking or abdominal tensing (tics). Speech language pathologists are trained to look for *all* the symptoms of stuttering, especially the non-verbal ones, and that is why an SLP is qualified to make a stuttering diagnosis.

The earliest this fluency disorder can become apparent is when a child is learning to talk. It may also surface later during childhood. Rarely if ever has it developed in adults, although many adults have kept a stutter from childhood.

Stuttering only becomes a problem when it has an impact on daily activities, or when it causes concern to parents or the child suffering from it. In some people, a stutter is triggered by certain events like talking on the phone. When people start to avoid specific activities so as not to trigger their stutter, this is a sure sign that the stutter has reached the level of a speech disorder.

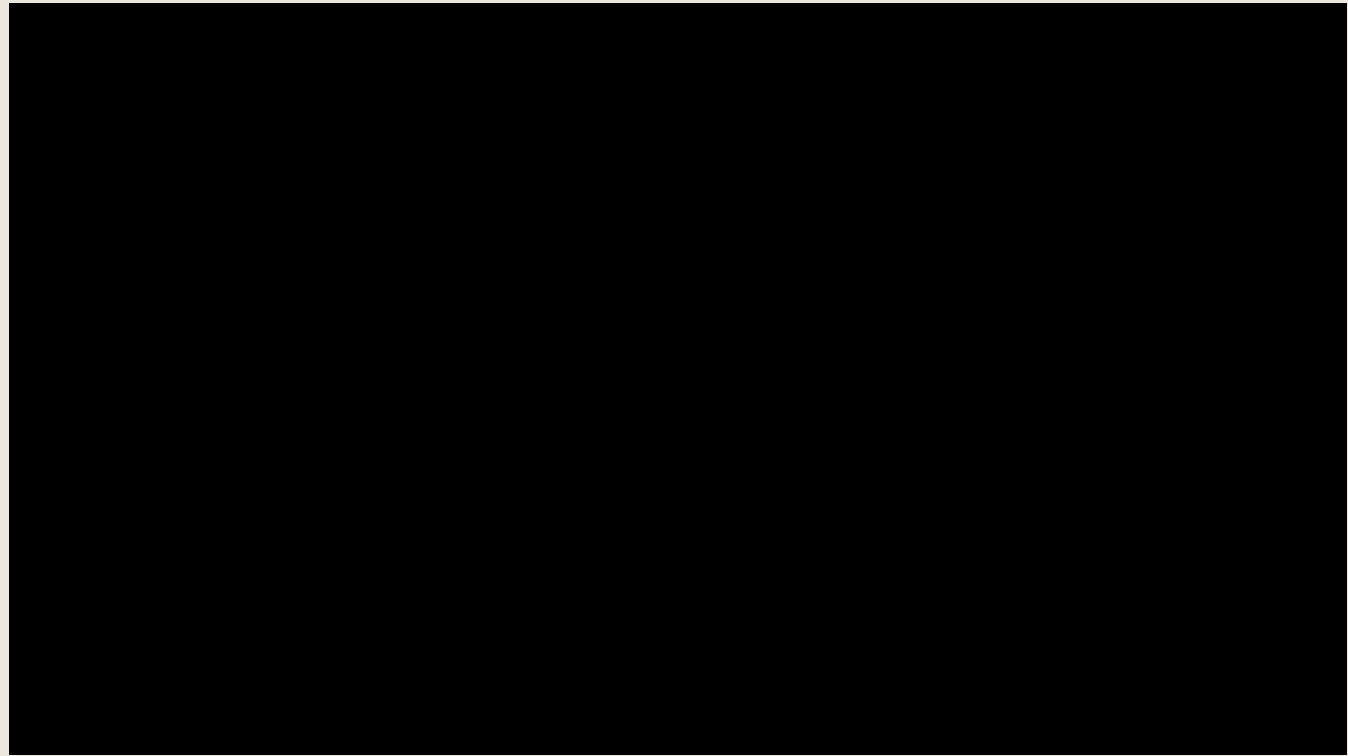
The causes of stuttering are mostly a mystery. There is a correlation with family history indicating a genetic link. Another theory is that a stutter is a form of involuntary or semi-voluntary tic. Most studies of stuttering agree there are many factors involved.

Because the causes of stuttering are largely unknown the treatments are mostly behavioral. Triggers often precede a stuttering episode, and SLPs can help people recognize and cope with these triggers ahead of time.



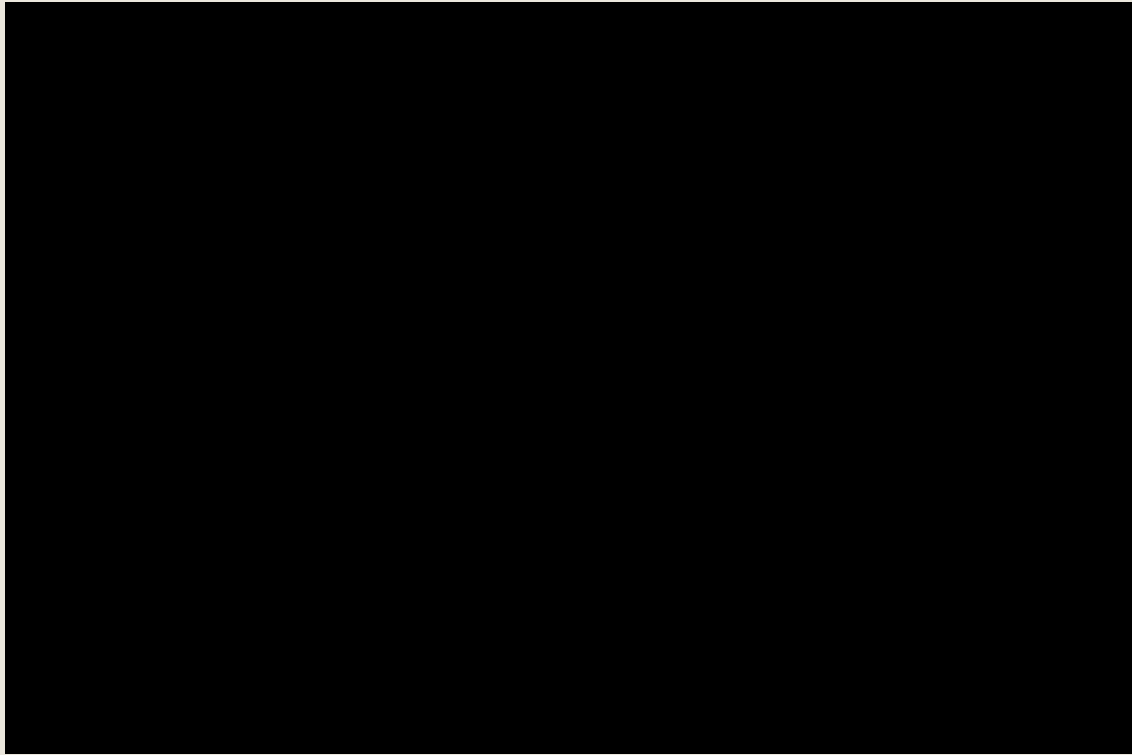
Dysarthria

- Dysarthria is a symptom of nerve or muscle damage. It manifests itself as slurred speech, slowed speech, limited tongue, jaw, or lip movement, abnormal rhythm and pitch when speaking, changes in voice quality, difficulty articulating, labored speech, and other related symptoms.
- It is caused by muscle damage, or nerve damage to the muscles involved in the process of speaking such as the diaphragm, lips, tongue, and vocal chords.
- Because it is a symptom of nerve and/or muscle damage it can be caused by a wide range of phenomena that affect people of all ages. This can start during development in the womb or shortly after birth as a result of conditions like muscular dystrophy and cerebral palsy. In adults some of the most common causes of dysarthria are stroke, tumors, and MS.
- As an SLP there's not much you can do about muscle damage, and even less you can do about nerve damage. So for treatments you'll focus on managing the dysarthria symptoms through behavior changes. This can include helping a person slow down when they're speaking, breath training, and exercising the muscles that are involved in speech.



Lisping

- A lay term, lisping can be recognized by anyone and is very common.
- Speech language pathologists provide an extra level of expertise and can make sure that a lisp is not being confused with another type of disorder such as apraxia, aphasia, impaired development of expressive language, or a speech impediment caused by hearing loss.
- SLPs are also important in distinguishing between the five different types of lisps. Most laypersons can usually pick out the most common type, the interdental/dentalised lisp. This is when a speaker makes a “th” sound when trying to make the “s” sound. It is caused by the tongue reaching past or touching the front teeth.
- Because lisps are functional speech disorders, SLPs can play a huge role in correcting these with results often being a complete elimination of the lisp. Treatment is particularly effective when implemented early, although adults can also benefit.
- Experts recommend professional SLP intervention if a child has reached the age of four and still has an interdental/dentalised lisp. SLP intervention is recommended as soon as possible for all other types of lisps. Treatment includes pronunciation and articulation coaching, re-teaching how a sound or word is supposed to be pronounced, practice in front of a mirror, and speech-muscle strengthening that can be as simple as drinking out of a straw.
- Lisps usually develop during childhood, and children will often outgrow an interdental or dentalised lisp on their own.



Spasmodic Dysphonia

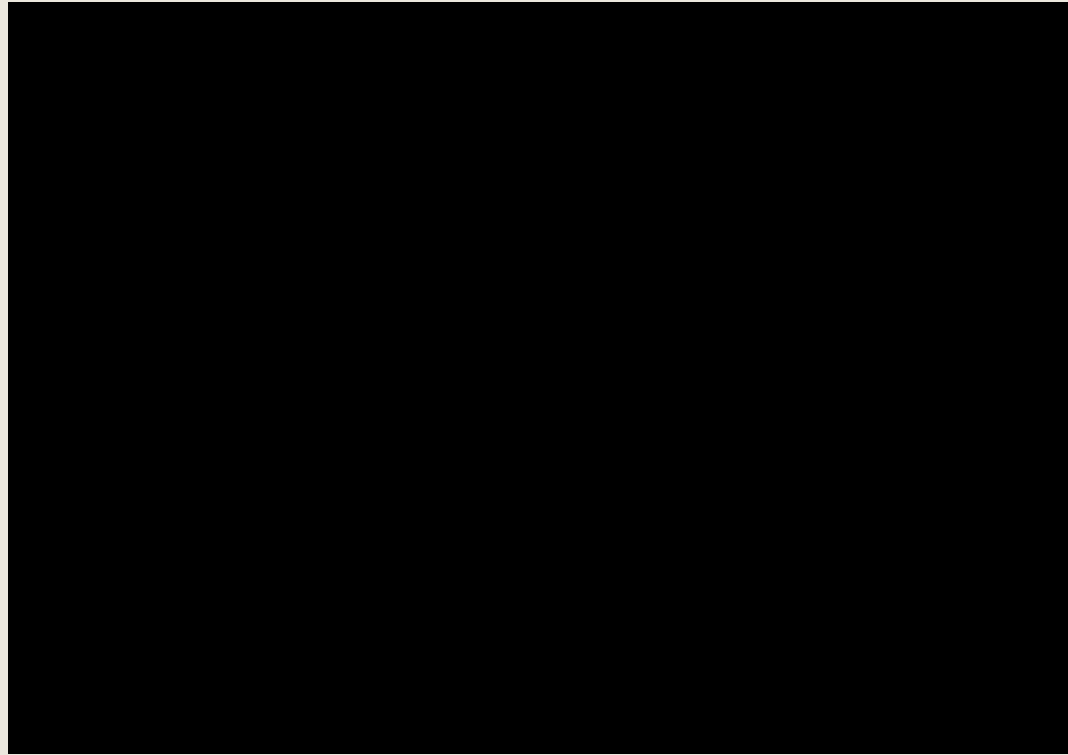
Spasmodic Dysphonia (SD) is a chronic long-term disorder that affects the voice. It is characterized by a spasming of the vocal chords when a person attempts to speak and results in a voice that can be described as shaky, hoarse, groaning, tight, or jittery. It can cause the emphasis of speech to vary considerably.

SLPs will most often encounter this disorder in adults, with the first symptoms usually occurring between the ages of 30 and 50. It can be caused by a range of things mostly related to aging, such as nervous system changes and muscle tone disorders.

It's difficult to isolate vocal chord spasms as being responsible for a shaky or trembly voice, so diagnosing SD is a team effort for SLPs that also involves an ear, nose, and throat doctor (otolaryngologist) and a neurologist.

After diagnosis SLPs can have a role helping with coaching to optimize voice production, and can be particularly effective in mild cases of SD. This especially includes working on breathing control techniques to maintain a steady flow of air from the lungs.

VIDEO





VOICE SAMPL ES

Cluttering

Have you ever heard people talking about how they are smart but also nervous in large groups of people, and then self-diagnose themselves as having Asperger's? You might have heard a similar lay diagnosis for cluttering. This is an indication of how common this disorder is as well as how crucial SLPs are in making a proper diagnosis.



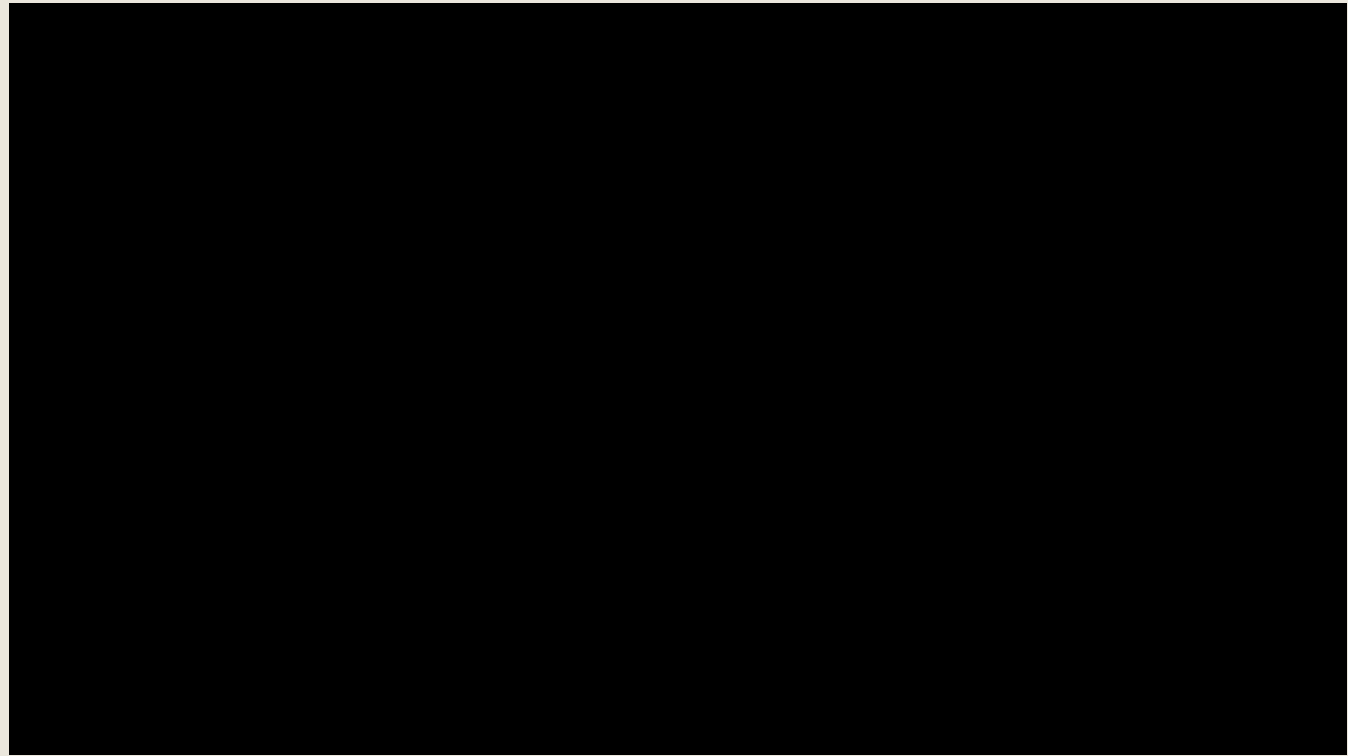
A fluency disorder, cluttering is characterized by a person's speech being too rapid, too jerky, or both. To qualify as cluttering, the person's speech must also have excessive amounts of "well," "um," "like," "hmm," or "so," (speech disfluencies), an excessive exclusion or collapsing of syllables, or abnormal syllable stresses or rhythms.



Treatment methods include delayed audio feedback, syllable articulation and annunciation coaching, playing games that involve rapid word retrieval, practicing pausing and phrasing in sentences, and increasing a clutterer's own self-awareness of what they are doing, such as through video recording.



The first symptoms of this disorder appear in childhood. Like other fluency disorders, SLPs can have a huge impact on improving or eliminating cluttering. Intervention is most effective early on in life, however adults can also benefit from working with an SLP.



Muteness – Selective Mutism

There are different kinds of mutism, and here we are talking about selective mutism. This used to be called elective mutism to emphasize its difference from disorders that caused mutism through damage to, or irregularities in, the speech process.

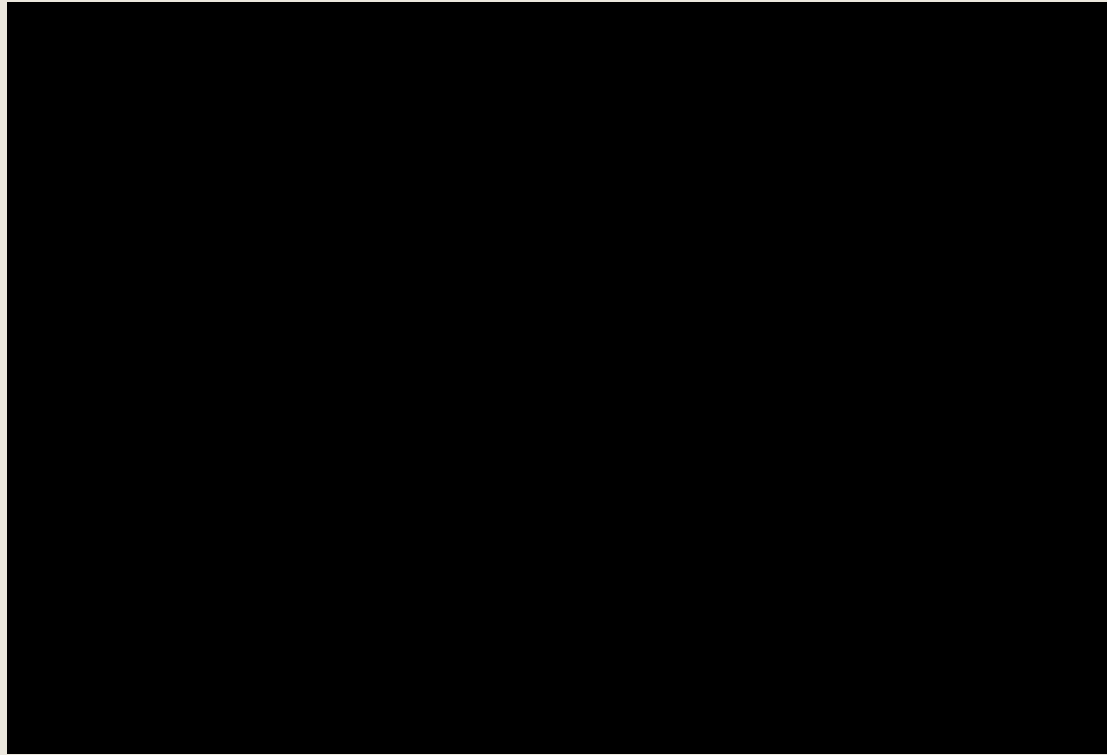
Selective mutism is when a person does not speak in some or most situations, however that person is physically capable of speaking. It most often occurs in children and is commonly exemplified by a child speaking at home but not at school.

Selective mutism is related to psychology. It appears in children who are very shy, who have an anxiety disorder, or who are going through a period of social withdrawal or isolation. These psychological factors have their own origins and should be dealt with through counseling or another type of psychological intervention.

Diagnosing selective mutism involves a team of professionals including SLPs, pediatricians, psychologists, and psychiatrists. SLPs play an important role in this process because there are speech language disorders that can have the same effect as selective muteness – stuttering, aphasia, apraxia of speech, or dysarthria – and it's important to eliminate these as possibilities.

And just because selective mutism is primarily a psychological phenomenon, that doesn't mean SLPs can't do anything. Quite the contrary.

SLPs can play an important role through working with selectively mute children to create a tailored behavioral treatment program and address speech and language disorders – such as stuttering – that may be contributing to psychological factors like excessive shyness.

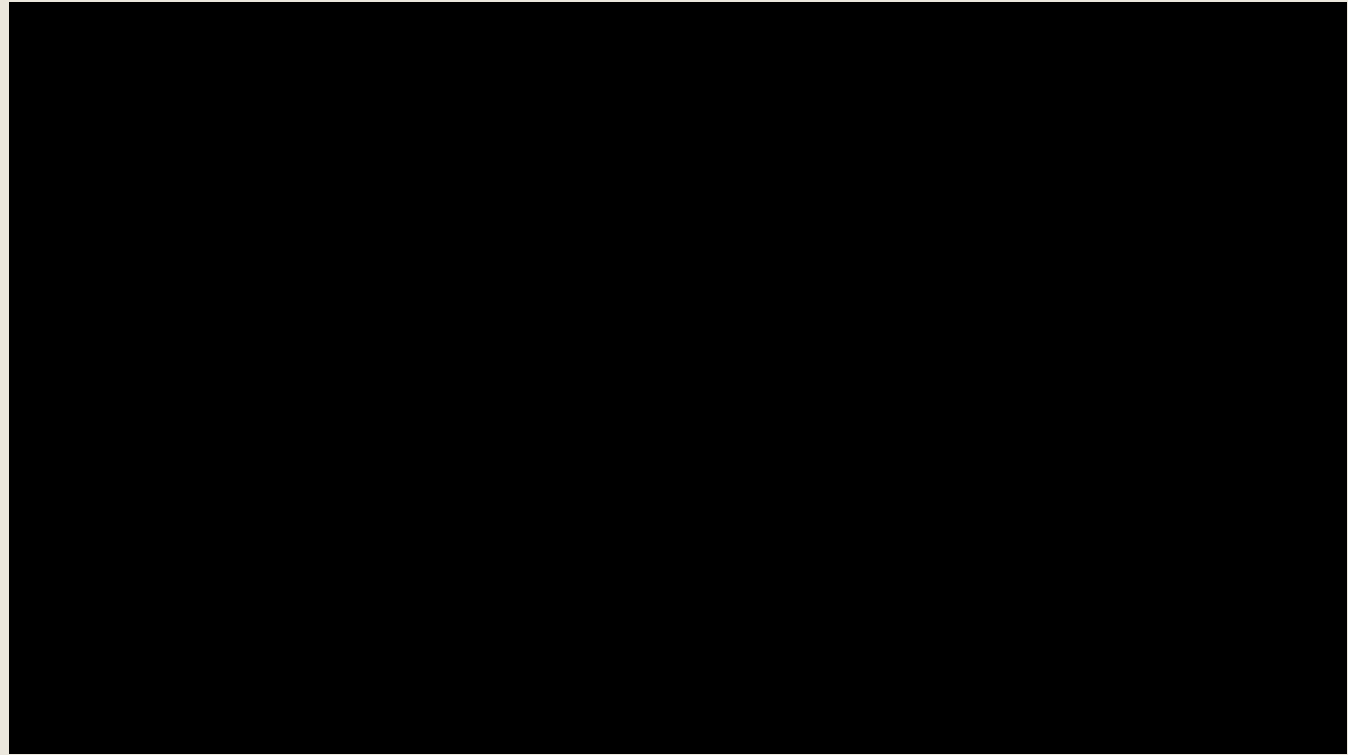


Aphasia

The National Institute on Neurological Disorders and Stroke estimates that one million Americans have some form of aphasia.

Aphasia is a communication disorder caused by damage to the brain's language capabilities. Aphasia differs from apraxia of speech and dysarthria in that it solely pertains to the brain's speech and language center.

As such anyone can suffer from aphasia because brain damage can be caused by a number of factors. However SLPs are most likely to encounter aphasia in adults, especially those who have had a stroke. Other common causes of aphasia are brain tumors, traumatic brain injuries, and degenerative brain diseases.



Speech Delay – Alalia

A speech delay, known to professionals as alalia, refers to the phenomenon when a child is not making normal attempts to verbally communicate. There can be a number of factors causing this to happen, and that's why it's critical for a speech language pathologist to be involved.

There are many potential reasons why a child would not be using age-appropriate communication. These can range anywhere from the child being a "late bloomer" – the child just takes a bit longer than average to speak – to the child having brain damage. It is the role of an SLP to go through a process of elimination, evaluating each possibility that could cause a speech delay, until an explanation is found.

Approaching a child with a speech delay starts by distinguishing among the two main categories an SLP will evaluate: speech and language.

Speech has a lot to do with the organs of speech – the tongue, mouth, and vocal chords – as well as the muscles and nerves that connect them with the brain. Disorders like apraxia of speech and dysarthria are two examples that affect the nerve connections and organs of speech. Other examples in this category could include a cleft palate or even hearing loss.

The other major category SLPs will evaluate is language. This relates more to the brain and can be affected by brain damage or developmental disorders like autism. There are many different types of brain damage that each manifest themselves differently, as well as developmental disorders, and the SLP will make evaluations for everything.

Once the cause or causes for the speech delay are identified then the SLP can go to work treating and monitoring the child. For many speech-language disorders that cause a speech delay, early intervention and evaluation by an SLP can make a huge difference.



CEREBRAL PALSY



Cerebral Palsy

Cerebral palsy (CP) is a group of nervous system disorders that cause muscle coordination problems and other movement issues. It may be caused by injury or infection during pregnancy or during or after birth. It may also be the result of genetic mutations.


No matter the cause, CP occurs early in life. Symptoms often show up in the first years of a child's life.

There is no condition known as late-onset CP. You can't develop this condition as an adult. Plus, CP is non-progressive. That means it doesn't worsen over a person's lifetime. However, as a person living with CP ages, the condition can cause new challenges and issues.


Read on to learn more about life as an adult with CP and how you can prepare for new challenges.

Cerebral Palsy – Symptoms in Adults

The symptoms adults with CP experience often depend on the type of CP they have, as well as the level.



Some forms of CP, such as spastic cerebral palsy, cause stiff muscles, exaggerated reflexes, and abnormal movements when walking or trying to move. CP can affect the entire body, but it may also only impact one side of it.



Common symptoms of Cerebral Palsy include:

muscle weakness, stiff muscles, scissor-like movements with legs when walking, paralysis, involuntary movements in hands, arms, and legs, twitching of the face and tongue, difficulty swallowing, loss of muscle tone, floppy limbs that move easily



As children with Cerebral Palsy grow into adults, they may decide to take on new experiences, with college and jobs. Cerebral palsy can make certain tasks more difficult, but many can attend school or work full-time with great success and achievement.



Employers are not allowed to discriminate against anyone in their hiring choices based on the applicant's disability or special needs.



Because of the Americans with Disabilities Act (ADA), employers are required to provide reasonable accommodations for employees with disabilities. These accommodations may include:

- Frequent Rest Period
- Device to reduce a physical toll (like a stool)
- A parking space closer to the door
- A desk closer to the restroom or office machines
- The use of other assistive devices

Cerebral Palsy – Challenges in the Workplace

Cerebral Palsy – Communication Tips



Offer a hand in friendship



Speak directly to them



Speak with them as you would with any other adult



Avoid leaning on his or her wheel

General Recommendations for All People with Developmental Disabilities



Avoid being self-conscious about your use of wording such as “Do you see what I mean?” when talking to someone with vision impairment.



Talk to people with disabilities as adults *and* talk to them directly rather than to an accompanying person.



Talk to persons with disabilities in the same way and with a normal tone of voice (not shouting) as you would talk to anyone else.



When communicating with a person with a disability, it is important to take steps to ensure that effective communication strategies are used. This includes sitting or standing at eye level with the patient and making appropriate eye contact.



Always use a “person first” approach. Always remember that the person is a human being and that you acknowledge their humanity first before the specific developmental disability that they may have. Example: Instead of saying “Down syndrome patients”, “patients with Down syndrome” is a better phrase

Chattanooga Autism Center

Signal Centers Inc.

Siskin's Children Institute

Keithcare Inc.

Autism & Behavior Services

RHA Health Services

Community Options, Inc

Agencies in
Chattanooga
that serve
those with
Developmental
Disabilities



In 1957, Signal Centers consisted of nine children with cerebral palsy, one small classroom, and a common goal to help individuals with disabilities achieve a life of self-sufficiency.



Serves nearly 200 children through our Children's Program and home-based services and have created programs like Adult Day Services and Assistive Technology Services to help meet needs in the community and further our mission of helping all individuals with disabilities, regardless of age, strive for a life of independence.



Partners with the City of Chattanooga and Blue Cross Blue Shield of Tennessee, Signal Centers implemented Baby University, an initiative providing mentoring, resource connection, and community building to families in Chattanooga.



Provides transitional employment services to youths and adults, a vital resource to those that need support in their own professional development, job exploration, and job retention.



Managing partner of the Tennessee Child Care Resource and Referral Network, a program providing training, advocacy, and technical assistance to licensed child-care professionals, parents, and children across all 95 counties in Tennessee.

Facts About Signal Centers

Signal Centers Inc. (Mission and Goals)



Mission

To strengthen children, adults and families through services focusing on disabilities, early childhood education and self-sufficiency.



Vision

A community that fosters lifelong independence for children, adults and families.



Values

Respect. Integrity.
Teamwork. Innovation.
Stewardship.

Programs at Signal Centers

- Signal Centers is comprised of six programs which are:
 - Children’s Services
 - Supports over 120 children with developmental disabilities in two locations which are Chattanooga and Cleveland
 - Adult Day Services
 - Program that serves over 55 adults with developmental disabilities and geriatric adults
 - Assistive Technology Services
 - Assesses individuals with disabilities of all ages and recommends technology for self-sufficiency
 - Employment Services
 - Promotes employment outcomes for people with disabilities by providing services to assist in preparing, obtaining, and maintaining employment.
 - Child Care Resource and Referral
 - provide resources for parents/caregivers, child-care professionals, employers and the community that support quality care and development of children. For more information, visit www.tnccrr.org.
 - Baby University
 - Partnership between the City of Chattanooga, Blue Cross Blue Shield of Tennessee, and Signal Centers to provide intensive case management services to expectant mothers.

Other Resources for those with Developmental Disabilities



UNITED STATES
DEPARTMENT OF JUSTICE
CIVIL RIGHTS DIVISION



THE ARC



AMERICAN ASSOCIATION
OF PEOPLE WITH
DISABILITIES

References

- <https://www.consultant360.com/articles/healthcare-issues-aging-adults-intellectual-and-other-developmental-disabilities>
- <http://www.nln.org/professional-development-programs/teaching-resources/ace-d/additional-resources/communicating-with-people-with-disabilities>
- <https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html>
- <https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>
- <https://www.mayinstitute.org/news/acl/asd-and-dd-adult-focused/tips-for-talking-to-adults-on-the-autism-spectrum/>
- <https://www.signalcenters.org/programs>
- <https://www.aaid.org/intellectual-disability/definition/faqs-on-intellectual-disability>
- <https://www.disabled-world.com/disability/types/vision/>