CONDITION

# Speech and communication disorders

Speech and communication disorders affect how a person speaks, understands language, uses their voice, or communicates with others.

**WHAT IT IS**
Conditions affecting speech, language, voice, fluency, or communication

**BODY SYSTEM**
Nervous system, hearing, mouth, throat, and voice

**MAIN SYMPTOMS**
Unclear speech, language difficulty, stuttering, unusual voice

**WHAT CAUSES IT**
Developmental, neurological, structural, hearing-related, or unknown

**HOW IT IS DIAGNOSED**
Speech-language assessment, hearing tests, cause-specific medical evaluation

**MAIN TREATMENT**
Communication therapy, supportive tools, and underlying-cause treatment

**CAN IT BE CURED?**
Sometimes - type and cause shape recovery

**IS IT AN EMERGENCY?**
Sometimes - sudden speech trouble may signal stroke

**LONG-TERM OUTLOOK**
Many people improve or communicate well with support

## Overview

Speech and communication disorders are a broad group of conditions affecting how people share or understand information. They can begin in childhood or develop later after an illness, injury, or change in the brain, hearing, mouth, throat, or voice.

Speech is the physical production of sounds and words. A speech disorder may affect pronunciation, the smooth flow of speech, or the movements needed for speaking.

Language is the system of words, sentences, and meaning used to communicate. A language disorder can affect understanding, speaking, reading, or writing.

Communication also includes voice, facial expression, gestures, conversation skills, and knowing how language is used in social situations. Some people communicate using signs,

pictures, communication boards, or electronic devices.

These conditions are not a measure of intelligence. Someone may understand much more than they can express. Communication differences can still affect learning, relationships, work, independence, and confidence, so an accurate assessment and practical support can matter.

## Symptoms

Symptoms depend on the part of communication that is affected. They may be mild and noticeable only in certain situations, or they may make everyday communication difficult.

Possible signs include:

A child may use fewer words or shorter sentences than expected, have difficulty following directions, or become frustrated when trying to communicate. Development differs between children, so one sign alone does not establish a disorder.

In adults, symptoms may appear suddenly after a stroke or head injury. They may also develop gradually with conditions affecting the brain or nerves.

A communication disorder is not the same as learning another language. A multilingual person may know different words in each language. A true language disorder generally causes difficulties across all the languages the person uses.

- Speech that is hard for other people to understand
- Leaving out, replacing, or distorting speech sounds
- Repeating sounds or words, stretching sounds, or becoming "stuck"
- Speaking unusually slowly, softly, loudly, or with reduced expression
- A voice that is persistently hoarse, strained, breathy, or weak
- Difficulty finding words, forming sentences, or telling a clear story
- Difficulty understanding questions, instructions, jokes, or conversation
- Trouble reading or writing after previously having those skills
- Difficulty taking turns, staying on topic, or interpreting social cues

## Causes and risk factors

Some speech and communication disorders have no single known cause. Developmental language disorder, for example, begins during childhood even though there may be no obvious

brain injury, hearing loss, or other medical explanation.

Other possible causes or associated conditions include:

Apraxia of speech occurs when the brain has difficulty planning the movements required for speech. Dysarthria happens when weak or poorly controlled muscles affect speech. Aphasia is a language disorder caused by damage to parts of the brain responsible for language, most often after a stroke.

Premature birth and certain developmental or neurological conditions can increase the chance of communication difficulties. Heavy voice use, smoking, and irritation from inhaled substances can contribute to some voice disorders. These factors do not explain every case.

Speech and language disorders are not caused by laziness, low effort, or poor parenting. Stuttering is also not caused by a parent drawing attention to a child's speech.

- Differences in brain development
- A family history of speech, language, or reading difficulties
- Hearing loss or repeated problems affecting hearing
- Cleft palate or other differences in the mouth and face
- Autism, intellectual disability, or genetic conditions
- Stroke, traumatic brain injury, or brain tumour
- Conditions such as Parkinson's disease, multiple sclerosis, or dementia
- Damage or growths affecting the vocal cords
- Surgery, injury, or disease involving the mouth, throat, or nerves

## Diagnosis

There is no single test for every speech and communication disorder. Diagnosis usually begins with a detailed assessment by a speech and language therapist, also called a speech-language pathologist in some countries.

The assessment may examine:

For children, the assessment usually considers age, development, play, education, and the languages used at home. Information from parents, caregivers, and teachers may help show how the child communicates in different settings.

A hearing test is often important because even mild hearing loss can affect speech and language development. An examination of the mouth, throat, and voice may be needed for

persistent voice or structural problems.

If symptoms appeared suddenly or follow other neurological changes, medical evaluation may include a brain scan and tests for stroke, injury, infection, or another cause. Gradually worsening symptoms may require a neurological assessment.

Assessment should consider all languages a multilingual person uses. Limited experience with the language used during testing should not be mistaken for a disorder.

- Speech sounds and how clearly they are produced
- Understanding and use of words and sentences
- Voice quality, pitch, and volume
- Stuttering or other disruptions to speech flow
- Movement and coordination of the lips, tongue, jaw, and palate
- Conversation, social communication, reading, and writing
- How communication affects daily life

## Treatment and management

Treatment is matched to the type of difficulty, its cause, and its effect on daily life. The goal may be to improve a specific skill, make communication easier, protect the voice, or help the person use another reliable way to communicate.

Speech and language therapy may focus on:

Children may receive support through health services, early-intervention programmes, or school. Practice may be built into play, reading, classroom activities, and daily routines. Therapy should not involve shaming or forcing a child to speak.

Adults with an acquired disorder may receive rehabilitation after a stroke, brain injury, or surgery. Progress can involve rebuilding skills and learning strategies such as writing key words, slowing conversations, or reducing background noise.

Augmentative and alternative communication, often shortened to AAC, includes gestures, signs, picture boards, letter boards, and speech-generating devices. AAC can support speech or provide another way to communicate. Using it does not mean giving up on spoken language.

Treatment of an underlying cause may include hearing devices, medical care for a neurological condition, or procedures for selected structural or voice problems. There is no general medicine that treats all communication disorders.

School or workplace adjustments can also help. Examples include extra time, written

instructions, quieter spaces, captioning, or permission to use communication technology.

- Producing speech sounds more clearly
- Strengthening language understanding and expression
- Practising word-finding or sentence-building strategies
- Managing stuttering with greater ease and confidence
- Improving voice use without harmful strain
- Supporting conversation, reading, or writing
- Training family members or communication partners

## Complications

Without suitable support, communication difficulties can affect learning, employment, relationships, and participation in social activities. Repeated misunderstandings may lead to frustration, embarrassment, or withdrawal. Some people experience anxiety, low mood, or bullying.

Communication problems can also create safety concerns if someone cannot easily report pain, describe an emergency, or understand complex instructions.

Some neurological conditions cause both speech problems and difficulty swallowing. Swallowing trouble is a separate concern that may require its own assessment, particularly if there is coughing or choking during meals.

## Prevention

Many speech and communication disorders cannot be prevented. This is especially true when they are inherited, developmental, or caused by an unpredictable illness.

Some risks can be reduced. Protecting hearing from excessive noise, using appropriate safety equipment to prevent head injury, avoiding smoking, and seeking care for persistent hearing or voice problems may help prevent certain difficulties or limit their effects.

Reducing the risk of stroke can also reduce the chance of stroke-related aphasia or motor speech problems. This involves managing established stroke risk factors with appropriate medical care.

Talking, reading, playing, and responding to a child support language learning, but they cannot guarantee that a developmental disorder will not occur.

## Living with it and what to expect

The course differs by the type and cause of the condition. Some childhood speech sound difficulties improve as the child develops, with or without therapy. Developmental language disorders often continue into adolescence or adulthood, although skills and coping strategies can improve.

Stuttering may change over time and can be more noticeable in some situations than others. A person may work toward easier communication and less distress rather than completely fluent speech.

After a stroke or brain injury, recovery is often greatest early on but may continue for months or years. The amount of recovery cannot always be predicted. Progressive neurological conditions may gradually affect communication, making early planning and adaptable communication tools useful.

Regular follow-up may be needed when needs change, such as when a child starts school, academic demands increase, or an adult returns to work. A communication system that works well now may need updating later.

Many people with long-term communication disorders study, work, maintain relationships, and take part in their communities. Helpful support may include therapy, technology, informed communication partners, and adjustments at school or work.

## When to get medical help

Arrange a routine assessment if a child is not developing speech or language as expected, loses interest in communicating, is frequently difficult to understand, or struggles to understand everyday language. A loss of skills that had already developed should be assessed promptly.

Adults should seek assessment for persistent changes in speech, language, voice, or communication. A hoarse or altered voice that does not settle also needs medical review, especially if it is accompanied by pain, a neck lump, or difficulty swallowing.

Seek prompt medical help after a head injury or when speech problems appear with new weakness, confusion, severe headache, balance problems, or swallowing difficulty.

Call emergency services immediately for sudden trouble speaking or understanding speech, especially with facial drooping, arm weakness, vision loss, or severe dizziness. These can be signs of a stroke. Emergency care is also needed for serious breathing difficulty or choking that does not clear.

## Common questions

Is a speech delay the same as a language delay?

No. A speech delay mainly affects the production of sounds and words. A language delay affects understanding or the use of words and sentences. A person can have one or both.

Will my child grow out of a speech or language problem?

Some difficulties improve with development, but it is not always possible to predict which ones will continue. An assessment can identify the affected skills and whether support is appropriate. Early assessment does not commit a child to long-term therapy.

Are communication disorders a sign of low intelligence?

No. Communication and intelligence are different. A person may have age-appropriate or advanced thinking skills while having difficulty speaking, understanding language, or expressing what they know.

Can adults suddenly develop a communication disorder?

Yes. Stroke, head injury, seizures, brain infection, and other neurological problems can affect speech or language. Sudden difficulty speaking or understanding language requires emergency assessment because it may be a stroke.

Will using a communication device stop someone from talking?

Evidence does not support the idea that AAC prevents speech. It can reduce frustration, increase participation, and provide a reliable way to communicate while spoken language is developing or being restored.

Can anxiety cause speech problems?

Anxiety can make stuttering, voice strain, or word-finding difficulty more noticeable, but it is not the cause of every communication disorder. New, persistent, or worsening symptoms should not automatically be attributed to anxiety.

## Sources

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