

DYSARTHRIA



What is dysarthria?

The term **dysarthria** means *dysfunction of articulation*. In other words, it is an articulation difficulty (or speech difficulty). However, the term is usually used to mean a speech difficulty which is caused by **neuromuscular impairment**. This is when there is damage that affects how the nerves send signals to the muscles that are used for speech.

What causes dysarthria?

There are a number of things that can cause dysarthria, including:

- brain injury
- neurological disease (e.g. Parkinson's, Multiple Sclerosis, Motor Neuron Disease)
- infections (e.g. meningitis)
- stroke
- brain tumor
- any condition that causes paralysis of muscles in the face
- toxins (e.g. some medications, alcohol abuse, drug abuse, carbon monoxide)

How does dysarthria affect speech?

Typically, the muscles that move the face, mouth, tongue, lips, jaws, vocal cords or breathing are weak. They move slowly and the range of movement is reduced. Movements are also less accurate and they are uncoordinated. The person finds it difficult to form sounds clearly and the speech sounds slurred. Because of this their speech can be difficult to understand, especially by strangers. As well as unclear speech the voice may be quieter than normal. This is because a person's breathing can also be affected. They can find it difficult to make themselves heard. People with dysarthria may also speak with a monotonous voice that can sound flat and uninteresting. These difficulties can be mild, moderate or severe.

Diagnosis of dysarthria

A speech therapist will assess a person's speech difficulties. They will find out the type of difficulty and how severe it is. They will usually do an articulation assessment to see how accurately the person can pronounce speech sounds and words. They will also assess movement of the face, tongue and lips. They will look at breathing and how strong the voice is. They will assess how well the person is able to communicate with other people.

Speech therapy

Speech therapy for dysarthria depends on its cause and severity. However, the speech therapist will typically help the person to improve the accuracy and coordination of mouth, tongue, lip and jaw movements. The aim is to improve the range and accuracy of movements. This is usually done through articulation exercises that have to be repeated regularly. Exercises to help the person project their voice and speak more loudly are often given. If the voice is flat and monotonous, the speech therapist will show the person how to stress words by changing their pitch and loudness. Overall, the aim is to improve the clarity of speech so that it is intelligible to as many people as possible.

Sometimes dysarthria may be so severe that there is little improvement even after trying speech therapy exercises. In these cases, the speech therapist may advise the use of an alternative and augmentative communication (AAC) system. This could be something that needs no equipment, such as signing. Or simple equipment such as a communication book or alphabet board may be used. Sometimes a computer device with a voice synthesizer may be required. There are many options and the speech therapist can advise on these.

I'm worried – what should I do?

In Europe and North America, if a person has suffered a stroke, head injury or has a diagnosed neurological condition, they will usually have already been seen by a medical consultant. The consultant is part of a team of professionals that usually includes a speech therapist. So, in most cases the person will already have been referred to a speech therapist. However, if you have not been referred you can always refer yourself or the person you are caring for.

Also, if you do not have a medical diagnosis but you have noticed speech changes like the ones described above, you should contact a doctor straightaway for advice.

Contact a speech therapist

For further information see [How to find a speech therapist](#) at the SLTINFO website.