



**Translational Centre
for Speech Disorders**
Centre of Research Excellence



Stuttering

Fact Sheet – Speech Disorders

Stuttering affects the flow or rhythm of speech. People who stutter may repeat sounds or words, prolong sounds, or sometimes may not be able to get their words out. People who experience stuttering know what they want to say.

What are the signs of stuttering?

People who stutter might show the following behaviours:

- Repetition of sounds, word parts, whole words, or phrases
- Sound prolongation, where sounds are stretched out in speech, e.g., sssssun
- Blocking of speech, where sounds get stuck, and no sound comes out for a period of time

These speech features may be accompanied by additional physical movements including:

- Facial tics (uncontrolled facial spasms such as rapid eye blinking or nose scrunching)
- Lip tremors
- Hand flapping
- Tension in the face and upper body

How common is stuttering?

Stuttering is common, affecting approximately 1% of the population globally. Males are more likely to stutter than females. A large Australian study found that 8.5% of children will experience a period of stuttering by the age of 3 years, and 11.2% by the age of 4 years. While many children (up to 65%) recover naturally from stuttering, this is not always the case. Early intervention is recommended from a speech pathologist (SP).

What causes stuttering?

Stuttering is not a language disorder or a psychological disorder. While we don't know the exact causes of stuttering, we know that both the brain and genes are involved.

Research studies have found:

- Stuttering can be associated with signal differences in the brain, nerves, and muscles,
- Stuttering can run in families and has been linked to differences in a person's genes.

A smaller number of individuals may have stuttering associated with known genetic conditions such as Koolen-de Vries syndrome or Down syndrome.

Further research into the causes of stuttering may help to develop more targeted treatments in the future.

Stuttering does not reflect a person's language, intelligence, or academic skills.



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How is stuttering treated?

Many children naturally recover from stuttering; however we are unable to predict who will recover and who will not.

Evidence shows that stuttering treatments work best when started early (i.e., before starting school). So, it is recommended that children who stutter receive treatment as early as possible, in order to see the most benefit. A speech pathologist will help determine the treatment best suited to your child.

The current best evidence suggests the following therapies for stuttering in children:

- Lidcombe Program
- Demands and Capacities Model

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