

Genetics of ADHD

ADHD runs in families:

- A parent with ADHD is likely to have one or more children with ADHD.
- A child with ADHD is likely to have a sibling or parent with ADHD. So when a doctor diagnoses ADHD in a child, it is not uncommon for parents to suspect that a parent or another son or daughter may also have ADHD.



ADHD is strongly influenced by genetics. From about 20 twin studies, researchers estimate that the heritability, or genetic influence, of ADHD is about 80%. This means that ADHD is almost as heritable as height or eye colour.

There does not seem to be one single gene that causes ADHD. Rather, certain genes seem to increase a person's chance of developing ADHD. Researchers believe that ADHD involves many different genes and that each gene has a small to moderate effect. Several of these genes are associated with neurotransmitters and proteins that carry messages in the brain.

Researchers are now studying:

- how such genes work together
- how genes interact with environmental factors to influence behaviour
- how genes interact with treatment

People hearing the word “genetic” often assume that nothing can be done about the condition. However, this is not the case. ADHD has a strong genetic component, but it is certainly treatable.

What this means for families

If one of your children has ADHD, your other children are more likely to have it as well. However, siblings with ADHD may:

- have very different ADHD symptoms
- have different types of problems at school or at home

If you or your spouse or partner has ADHD, this can cause additional parenting challenges.

Notes: