

Attention-Deficit/Hyperactivity Disorder (ADHD)

What is ADHD? What are the Symptoms of ADHD?

ADHD is a real, brain-based disorder that involves problems or delays in the development of self-control. People with ADHD typically have many great skills, such as high levels of enthusiasm, energy, and creativity. However, they have more difficulty than others their age with **planning, organizing, and controlling their thoughts, feelings, and actions**. About 5-8% of school-age children and adolescents worldwide have ADHD. Here are some of the signs and symptoms of ADHD.

Students who have ADHD often show many of the following **information processing problems**:

- **Attention problems:** These children have a lot of problems with attention. They can't focus, or seem to focus on the wrong things (they may even *hyperfocus* on something they love like videogames). They have trouble tuning out distractions, too. Sometimes it can be hard to tell if they are listening – they may seem like they are daydreaming, looking around, or thinking about something else.
- **Planning and Organization problems:** Children with ADHD can be disorganized. They may leave a "trail" of belongings everywhere. They might not use their planners at school, and might forget homework or books. ADHD makes it difficult to break a large task down into steps, so these students often don't know how to work through complex projects. Time management is often poor.
- **Trouble with Initiative, Motivation, and Persistence:** These children often have a hard time getting started on tasks, coming up with ideas (like when they are writing a paragraph), staying motivated when tasks are boring or difficult, and avoiding procrastination. Homework can be a big battle.

Students who have ADHD may have the following **learning and memory problems**:

- **Problems with Following Directions:** Kids with ADHD may not be able to follow 2 or 3-step directions. You may ask them to go brush their teeth, and find them playing in their room. Morning or bedtime routines might be hard. They often have trouble following the teacher's or coach's directions, too.
- **Memory Problems:** Students with ADHD sometimes need a lot of repetition, and may even seem "forgetful." Or, they might seem inconsistent, as if they know a concept one day, but have forgotten it the next day. They may have trouble learning sequences (like days of the week) and math facts.
- **School problems:** These students may underachieve in school, even though they seem bright. A good way to describe students with ADHD is as "smart but scattered." These students are creative, "out of the box" thinkers -- many famous inventors and entrepreneurs have had ADHD. This is a great strength, but can also make follow through at school and at home frustrating.

Students who have ADHD may have the following **self-control problems**:

- **Fidgety, Restless Behavior:** Sitting still – without wriggling in their chair or, in older children, bouncing their legs or tapping their fingers – can be hard for kids with ADHD. These students may always be singing, humming, or making little noises. Girls with ADHD may be very “chatty.”
- **Hyperactivity:** Some children with ADHD are always “on the go.” They run more than they walk. They climb on furniture. They may always be dancing or twirling – anything but sitting still. They may not even be able to make it through a meal or a movie without getting up multiple times. They might not recognize when they get too excited. They might get into others’ personal space.
- **Impulsivity:** Children with most types of ADHD act before they think. They may make decisions before they have all the information they really need. This can lead to careless errors, guessing too soon, or rushing through tasks. They might also impulsively misbehave even though they later regret it.
- **Impatience:** Children with ADHD usually want things to happen right away. They have trouble waiting. They might interrupt others, or blurt out answers. They often want to be “first” in line or in a game. Sometimes they seem too competitive, bossy, or controlling.
- **Note:** These self-control problems are usually not as much of a problem for children with the “predominantly inattentive” subtype of ADHD. Children with that subtype usually have more information processing problems and fewer self-control problems.

Students with ADHD often show some of the following **emotional problems**:

- **Poor frustration tolerance:** These children often have difficulty controlling their emotional response to situations. They might be overwhelmed or frustrated by ‘little’ things, like not getting their way immediately, or work that seems hard. They may have “dramatic” emotions.
- **Anxiety:** Children with ADHD typically live in the “now” and are not naturally inclined to think about the future. Because they can have trouble anticipating what is going to happen in the future, children with ADHD are at risk for experiencing anxiety. Many children with ADHD ask a lot of repetitive questions or need reassurance. They are also vulnerable to low self-esteem, and even depression if they do not get the support they need.

Children who have ADHD can have **social problems**:

- **Trouble Keeping Friends:** Children with ADHD want to have friends, and are usually outgoing. Some are even very popular. However, for other children with ADHD, their inattention, impulsivity, impatience, and hyperactivity can get in the way of friendships. These children might have trouble sharing, taking turns, or doing what someone else wants to do. Some children with ADHD also “miss” subtle social cues, like a friend’s annoyance at being interrupted.

Symptoms of ADHD can lead to the following physical and sensory problems:

- **Difficulty “Visually Tracking”:** Some kids with ADHD struggle so much with organization that they have trouble using organized visual tracking skills. They may look all over a page instead of scanning it carefully from right to left. Or, their eyes may skip lines when they read. This is usually a symptom of ADHD, not a vision problem, although some optometrists like to treat this problem separately.
- **Delays in Fine-Motor Skills:** A lot of children with ADHD dislike writing. Their brains often ‘think’ faster than they can write, which can be frustrating for them. Handwriting may be messy. Kids with ADHD can also struggle with other motor tasks that require close and careful attention and planning, like tying shoes. Some children with ADHD have tics, which are repetitive motor movements, like eye blinking, or throat clearing.
- **Sensory Processing Problems:** ADHD can cause a child to be less organized in how they process sensory information and approach their environment. Some children with ADHD over-react to sensory experiences, such as tags or seams on their clothing. Other children with ADHD seek out extra sensory input, through seeking movement, touch, or deep pressure. They might also fidget by biting on objects or clothes, or by chewing gum.

What are “Executive Functions”?

If your child has had an evaluation for ADHD, you may have been told that he or she has trouble with “executive functioning.” What does this mean? Executive functions are the skills that help us plan, organize, and control our behavior so that we can meet goals. Executive functions include attention, organization, inhibition, self-control, mental flexibility, short-term memory, and motivation. Most children with ADHD have delays in their development of these executive function skills. This is because the same brain areas that help people pay attention and control impulsivity are also involved in many other executive function skills. A lot of the problem areas listed above are actually ways that problems with executive functioning can affect kids in their everyday lives.

What is the Difference between ADHD and Sensory Processing Disorder?

Your child experiences the world through his or her senses, including touch, taste, sight, and sound. We look with our eyes, touch with our hands, and hear with our ears – but all sensory *processing* takes place in the brain. So if anything is different or unique about how your child’s brain is developing, it can affect how they process sensory information.

Children with brain-based disorders like ADHD have trouble processing information in an organized way. This shows up in how they process all information – even sensory information like touch, sound, and movement. Because children with ADHD process sensory information in a disorganized way, this can lead to sensory problems like over-reacting to touch, seeking out movement, and poor coordination. While some professionals believe sensory problems *cause* disorders like ADHD, **most** scientists believe sensory problems are a *symptom* of ADHD. If your child’s sensory problems are severe, treating them may be helpful. But remember that treating sensory problems only addresses one symptom of ADHD, not the underlying cause.

How Can I Help My Child with ADHD?

While books, websites, teachers, and professionals can provide you with good information about ADHD and executive functions, you are the ultimate expert on your child. Only you can decide what is best for your child. Most children with ADHD benefit from a combination of proactive parenting, help at school, psychological (behavioral) treatment, and medical treatment. Not every child with ADHD needs all of the following supports all of the time. However, depending on their needs, your child may benefit from:

- **Behavioral Interventions:** This is the term used for all of the strategies that help kids develop their attention and executive skills at home and at school. Many of these strategies can be found in the books and websites listed in the 'Resources' section on the last page.
- **Lot of Rewards:** The brains of children with ADHD are about 4-5 times more sensitive to rewards than to punishment! Try to use 4-5 times as much praise as you do criticism. Offer rewards for behaving appropriately. Rewards don't have to be things you buy with money – a smile, praise, a high-five, or special time spent with you can go a long way.
- **Support at School:** Children with ADHD often need support to fulfill their potential at school. They often need preferential seating (sitting up front), extra time to do their work, and multisensory instruction. Talk to your child's school staff about whether he or she is eligible for a 'Section 504 Plan.' A Section 504 Plan is a document listing accommodations a student with a disability needs to succeed.
- **Parent Training:** You already know parenting a child with ADHD is hard work! Many parenting strategies that work for other kids just do not work with kids with ADHD. You might want to take an advanced "parent training" course led by a therapist, or attend a parenting support group.
- **Individual Therapy:** There is no known therapy that "cures" ADHD. However, some children with ADHD benefit from short-term work building self-control, social skills, or self-esteem, depending on their needs. Some older students with ADHD benefit from a tutor or academic 'coach.'
- **Occupational Therapy:** Occupational therapy helps a child develop stronger motor and sensory skills. Your child might qualify to receive occupational therapy at school if he or she needs it.
- **Exercise, Routine, and Activities:** Children with ADHD need lots of exercise, plenty of sleep, good nutrition, and a lot of structure in their lives. Play is also really important for kids with ADHD. They also do best in highly structured extra-curricular activities involving fun, socializing, and movement.
- **Medication:** Many children with ADHD truly benefit from medication at some point in their development. However, medication is not the right choice for every family. Talk to your child's doctor about the advantages and disadvantages of medication.
- **Buyer Beware!** Research has shown there are no known vitamins, supplements, or dietary changes that can effectively treat ADHD. There is also no evidence that any "alternative" therapies cure – or even help treat – ADHD, though many of them are expensive and time-consuming! Use caution if someone promises claims that sound "too good to be true."

What Strengths Do Children with ADHD Have?

Children with ADHD are usually outgoing, energetic, and funny. They like to learn through hands-on exploration and multisensory techniques. They often have a lot of great ideas, and are truly caring and compassionate. Because these children live in the “now”, they can be spontaneous, fun-loving, and able to keep everyone’s spirits high. Children with ADHD can also be very creative! Other words people often use to describe kids with ADHD include charming, generous, hard-working (when motivated), and just fun to be around. People with ADHD are often successful in ‘non-traditional’ fields like art, music, athletics, and other areas where they can use their social skills, creativity, and enthusiasm. It is very important to help kids with ADHD discover these talents, and to give them opportunities to pursue these skills.

Will My Child “Outgrow” ADHD?

Your child’s symptoms of ADHD will change as he or she develops. For example, he or she may have fewer problems with hyperactivity, and more problems with organization, as they get older. Your child will also continue to develop their attention and executive functions as they mature – the part of the brain that is most involved in ADHD keeps developing until people are in their mid-20s! Yet, your child’s attention and organization skills may always be their areas of weakness. About 50% of children with ADHD no longer meet criteria for ADHD when they are adults, but about 50% still do meet full criteria even as adults. Most adults who were diagnosed with ADHD as children continue to benefit from supports that were helpful during childhood, including behavioral and medical treatment. However, almost all adults with ADHD build successful families, have deep friendships, pursue interesting hobbies, and find work that they enjoy.

Resources:

1. *Taking Charge of ADHD: The Complete, Authoritative Guide for Parents*, by Russell Barkley
2. *The ADHD Book of Lists*, by Sandra Reif
3. Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD), www.chadd.org; and the National Resource Center on ADHD, www.help4adhd.org.
4. *Smart But Scattered: The Revolutionary “Executive Skills” Approach to Helping Kids Reach Their Potential*, by Peg Dawson and Richard Guare
5. *Late, Lost, and Unprepared: A Parent’s Guide to Helping Children with Executive Functioning*, by Joyce Cooper-Kahn and Laurie Dietzel
6. *The Motivation Breakthrough: Six Secrets to Turning On the Tuned-Out Child*, by Richard Lavoie
7. *Putting on the Brakes: Young People’s Guide to Understanding ADHD*, by P. Quinn and J. Stern