

# Attention-Deficit/Hyperactivity Disorder (ADHD)

## What is it?

ADHD is an acronym for Attention-deficit/Hyperactivity Disorder. It is a neurological brain disorder that is marked by a continual pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than what considered typical for someone of that age.

## Does it affect me?

There are two main problems identified with ADHD: (1) Inattention and (2) Hyperactivity / Impulsivity. These problems are further broken down into individual symptoms.

Inattention	Hyperactivity/Impulsivity
Poor attention to detail/carelessness	Fidgetiness/squirminess
Difficulty sustaining attention	Difficulty remaining in seat
Does not appear to listen	Runs about or climbs excessively
Often fails to complete tasks	Difficulty with quiet activities
Difficulty with organization	Often seems “on the go”
Avoids/dislikes focused tasks	Talks excessively
Loses things easily	Blurts out answers or opinions
Easily distracted	Difficulty waiting or taking turns
Forgetful of daily activities	Interrupts or intrudes on others

\* It is important to note how **common** and **normal** these symptoms are in children and adults, being mindful of the overlap they have with other mental and physical health problems.

The symptoms listed above must be:

- **Chronic:** lasting at least six months consistently
- **Present from a young age:** onset must be prior to age 7
- **Observable and problematic across many settings:** for example, at home, school, work, etc.

## How do you find out if you have ADHD?

There is no one test for ADHD, but a comprehensive evaluation completed with a professional is needed to establish a diagnosis. The evaluation is long and requires sustained mental effort to complete. In addition to the testing, information related to current functioning and background will be collected. Reports from several people are also helpful in establishing a diagnosis: (1) parents report about home functioning, (2) teachers report about school functioning, (3) co-workers report about work functioning, and (4) friends report about social functioning. Typically, the testing battery includes symptom checklists, rating scales to identify emotional and behavioral signs, intelligence testing, and achievement testing.

## How common is it?

By definition, ADHD begins in childhood prior to age 7, and according to recent research, it can continue into adulthood. While some children “outgrow” ADHD, evidence suggests that up to 70% can continue to have symptoms of inattention in adulthood. Hyperactivity typically diminishes with age. According to a 2003 Centers for Disease Control study, 7.8% of children between the ages of 4 and 17 have ever been diagnosed with ADHD. Research indicates that nearly 4% of adults in the U.S. continue to have ADHD.

## Is Adult ADHD any different from Childhood ADHD?

Because ADHD is a neurological condition that starts during childhood, symptoms that adults experience are not new, but rather, have continued from childhood. Most adults who have continued symptoms may notice problems with difficulty paying attention to details, organization, talking fast, and difficulties focusing and concentrating. Adults with ADHD do not typically report problems with hyperactivity; either the symptoms have subsided or they have developed coping strategies for handling their increased activity level. There is no evidence that ADHD develops during adulthood. Concentration problems and distractibility in adults are often due to other problems such as depression, anxiety, stress in relationships, or occupational stress. Any of these and other mental health conditions can mimic the symptoms of ADHD, but they are not ADHD.

Associated problems and consequences that often co-exist in adults who have continued symptoms of ADHD from childhood may include:

- Poor self control
- Easily bored
- Forgetfulness
- Low self-esteem
- Difficulty focusing
- Substance abuse
- Poor time management
- Difficulty regulating emotions, arousal, and motivation
- Relationship problems
- Anxiety/depression
- Poor time perception
- Mood swings
- Variability in work performance
- Employment difficulties
- Chronic lateness
- Risk-taking behaviors

## Resources and Suggested Readings

### Children

Quinn & Stern (2001). *Putting on the brakes: Young people's guide to understanding Attention-deficit/Hyperactivity Disorder*.

Nadeau, Nixon, & Beyl (2004). *Learning to slow down & pay attention: A book for kids about ADHD*.

### Adolescents

Ziegler Dendy, & Ziegler (2003) *A Bird's-Eye View of Life with ADD and ADHD: Advice from Young Survivors*.

### Parents

Barkley (2000). *Taking charge of ADHD: The complete, authoritative guide for parents*.

Barkley & Benton (1998). *Your defiant child: Eight steps to better behavior*.

### Adults

Kelly & Ramundo (1995). *You mean I'm not lazy, stupid, or crazy: A self-help book for adults with attention deficit disorder*.

Hallowell & Ratey (1995). *Driven to distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood Through Adulthood*.

### Websites

Children and Adults with Attention-deficit/Hyperactivity Disorder : [www.chadd.org](http://www.chadd.org)

Teens Health: [www.kidshealth.org/teen/school\\_jobs/school/adhd.html](http://www.kidshealth.org/teen/school_jobs/school/adhd.html)

Teens with ADHD by Chris Dendy: [www.chrisdendy.com](http://www.chrisdendy.com)

ADHD News: [www.adhdnews.com](http://www.adhdnews.com)

## What are my treatment options?

Treatment for ADHD is often “multimodal”—that is, it often involves any combination of education, skills training, behavioral interventions, and medication. Depending on your symptoms and response to these interventions, treatments will vary on a case-by-case basis. As with most illnesses, it is highly recommended to start with the least invasive options first. In treating ADHD, exhaustive attempts at behavioral interventions should initially be pursued before beginning a trial of medication.

### Behavioral Interventions

Behavioral Modification, or B-Mod, is typically the type of behavioral intervention that is used in the treatment of ADHD. B-Mod is a process where individuals learn specific skills and techniques designed to alter habits/problem areas and replace them with more adaptive, functional responses. As parents, if we can consistently alter the antecedents (how we make requests) or consequences (our reaction when the child obeys or disobeys), we can alter our child's behaviors and shape a more functional way of responding. As an adult trying to shape your own behaviors, similar contingencies (“if...then” scenarios) are helpful in establishing a behavioral plan that encourages a desired behavior attached to a reward (e.g., if I complete X, then I can do Y).

Common guidelines for implementing a B-Mod plan include:

1. Start with goals that are small and attainable
2. Be consistent—regardless of time of day, setting, and situation
3. Follow through with the behavioral intervention over the long haul
4. Remember that learning new skills takes time and is gradual—don't give up!!

Suggestions for Parents:

- Provide clear, concise expectations, directions, and limits—avoid ambiguity
- House rules and structure are a necessity—plan ahead and predict barriers
- Set up an effective discipline system based on rewards and consequences
- Change the most problematic behaviors first—use charts/graphs to see progress
- Help your child in social situations—promote cooperation and peer interaction
- Teach social skills and promote extracurricular activities
- Identify & build on your child's strengths—promote confidence, success, and esteem
- Have a “special time” for your child—TLC goes a long way in maintaining self-worth
- Learn to praise appropriate behaviors and ignore minor inappropriate behaviors

### **Pharmacological Interventions**

Strong evidence supports the use of stimulant medication for the management of inattention, impulsivity, and hyperactivity in school children. Studies suggest that 70-80% of children with ADHD improve with the use of stimulant medication. Some changes include: academic improvement, increased focus and concentration, increased compliance and effort, and decreased activity level and impulsivity. Medical intervention often involves a trial of Ritalin, Concerta, Adderall, Dexedrine, or Strattera (an effective non-stimulant). The effects of these medications are typically felt within 30-60 minutes of taking the medication. Increasing, decreasing, or terminating medication is determined on a case-by-case basis to maximize functioning.

**Tips for Parents**

**Tips to help parents identify common problem areas for children**

<b>Writing/Language Problems</b>	<b>Strategy</b>
Children with ADHD often have poor handwriting, grammar, and spelling skills. Listening to information, processing it, and writing it down is challenging. Comprehension of instructions and expression of thoughts and ideas is often difficult.	Parents need to be supportive; consider writing down answers given verbally by your child; encourage a language-rich environment and never shame your child for slow processing or misuse of words.
<b>Missing Assignments</b>	<b>Strategy</b>
Children with ADHD have difficulty keeping track of information, lose track of time, and often turn in assignments late. They have intentions of being compliant, but lack organizational skills.	Develop a system and provide support at each stage of project completion; use checklists, labels, and color-coded binders/folders for all subjects; establish and keep a routine; prevent procrastination by using independence as a reward.
<b>Distractibility</b>	<b>Strategy</b>
ADHD is marked by an inability to control what one pays attention to, and is not always a conscious decision. Children with ADHD are often unable to inhibit their responses to distractions, such as outside noises, movement, or their own thoughts.	Establish a daily homework routine with scheduled breaks; create a comfortable, distraction-free environment to facilitate focus; communicate with teachers if your child seems to lack the skills needed to complete an assignment or if it takes an inordinately long time.
<b>Immature Social Behavior</b>	<b>Strategy</b>
Children with ADHD often have a hard time reading social cues, may misinterpret remarks, or miss the point of a conversation.	Involve your child in activities such as music, sports, or other hobbies to identify strengths; role play everyday situations with your child and allow them to practice these skills in a “safe environment”; children with ADHD are often great playmates with younger children and can learn to foster positive caring traits without feeling threatened by same-age peers.
<b>Following Instructions</b>	<b>Strategy</b>
Multi-step directions are notoriously difficult for children with ADHD, as they often only hear bits and pieces of the request.	Break down large tasks into multiple, smaller steps; create checklists and use reward systems when possible; use redirection and explanation rather than punishment for distraction.
<b>Impulsivity</b>	<b>Strategy</b>
Children with ADHD are often labeled as unruly or aggressive because of their impulsive physical and social interactions. They often have difficulty controlling impulses, despite having caring & sensitive intentions.	Natural consequences are important parts of discipline and are expected to occur; provide immediate, positive feedback and attention for appropriate behaviors; the most successful discipline is specific, proactive, and directive; avoid ambiguity (“Be good”) and tell your child exactly what behavior is expected.

Adapted from [www.adhd.com](http://www.adhd.com) “Tips for Schools and Home”; Eli Lily & Co

**Tips for Teachers**

**Tips to help teachers address common problem areas for students**

<p><b>Writing/Language Problems</b></p> <p>Children with ADHD often have poor handwriting, grammar, and spelling skills. Listening to information, processing it, and writing it down is challenging. Comprehension of instructions and expression of thoughts and ideas is often difficult.</p>	<p><b>Strategy</b></p> <p>Consider giving extra time or abbreviated assignments; offer corrections, but avoid taking off points on less important areas (e.g., spelling vs. completing the book report); make yourself available for additional questions and explanations.</p>
<p><b>Missing Assignments</b></p> <p>Children with ADHD have difficulty keeping track of information, lose track of time, and often turn in assignments late. They have intentions of being compliant, but lack organizational skills.</p>	<p><b>Strategy</b></p> <p>Supervision and structure are critical; cues and reminders can be helpful, and ensure the child writes down assignments and stores paperwork in a homework folder; track progress periodically on long-term projects; use positive and instructive comments for corrections.</p>
<p><b>Distractibility</b></p> <p>ADHD is marked by an inability to control what one pays attention to, and is not always a conscious decision. Children with ADHD are often unable to inhibit their responses to distractions, such as outside noises, movement, or their own thoughts.</p>	<p><b>Strategy</b></p> <p>Have child sit close to teacher and away from doors and windows; use privacy dividers to limit distraction during individual study/work time; lessons should involve visual &amp; auditory aids, and should be kept short; use a variety of pacing and gesturing to capture attention; use nonverbal cues (e.g., tapping) to refocus attention.</p>
<p><b>Immature Social Behavior</b></p> <p>Children with ADHD often have a hard time reading social cues, may misinterpret remarks, or miss the point of a conversation.</p>	<p><b>Strategy</b></p> <p>Talk with teachers about your child’s social immaturity; teachers should use positive reinforcement, especially in front of peers, to help reduce the child’s use of inappropriate antics for attention; one-on-one social modeling followed by small group work can help children develop appropriate behaviors.</p>
<p><b>Following Instructions</b></p> <p>Multi-step directions are notoriously difficult for children with ADHD, as they often only hear bits and pieces of the request.</p>	<p><b>Strategy</b></p> <p>Teachers should use specific, brief, and personal instructions whenever possible; written instructions are best so children can review assignments again later; consider recording classes if possible; have children repeat instructions back to you to ensure understanding.</p>
<p><b>Impulsivity</b></p> <p>Children with ADHD are often labeled as unruly or aggressive because of their impulsive physical and social interactions. They often have difficulty controlling impulses, despite having caring &amp; sensitive intentions.</p>	<p><b>Strategy</b></p> <p>Rules that are posted in the classroom make expectations clear and serve as written reminders to think before you act; tape targeted behavior cards to the child’s desk that encourage appropriate activity (e.g., raise hand to ask a question); give periodic warnings of pending transitions in activity to avoid a meltdown (e.g., “We have 5 more minutes before lunch”); anticipate problem situations.</p>

Adapted from [www.adhd.com](http://www.adhd.com) “Tips for Schools and Home”; Eli Lily & Co