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Family's Guide to ADHD

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What is ADHD?

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder identified by symptoms of **inattention**, **hyperactivity/impulsivity**, or both that is occurring and causing **significant difficulties in multiple settings** such as school, home, and/or in the community. This guide is to provide information to further the understanding of ADHD, the behaviors associated with ADHD, and to provide an effective overview of treatment options.

> **Please note:** Attention-Deficit Disorder (ADD) is no longer a formal diagnosis. *Hyperactivity is often most prominent in younger children and inattention typically becomes the primary problem after elementary school. This may be due to developing coping strategies to manage hyperactivity and/or due to the increase in demands exceeding their capacity making it difficult to keep up with responsibilities, especially with reduced supervision.*

Instead, ADHD is considered an overarching umbrella term for the following three medical diagnoses, and individuals may change between presentation types as they continue to develop:

1. ADHD Predominantly inattentive presentation (**ADHD-I**; formerly ADD)
2. ADHD Predominantly hyperactive/impulsive presentation (**ADHD-H**)
3. ADHD Combined presentation (**ADHD-C**)

Below are CORE symptoms of ADHD

Inattention	Hyperactivity/Impulsivity
Poor attention to details, careless errors	Fidgetiness/squirminess
Difficulties sustaining attention	Difficulties remaining seated when expected
Does not appear to listen/hear (not defiance)	Runs and/or climbs excessively
Often fails to complete tasks, follow through	Difficulties with quiet activities
Difficulties with organization	Often seems "on the go"
Avoids/dislikes tasks requiring mental effort	Talkative, talks excessively
Loses things easily	Blurts out answers/opinions
Easily distractible	Difficulties waiting or taking turns
Forgetfulness	Interrupts or intrudes on others

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How is ADHD Assessed and Diagnosed?

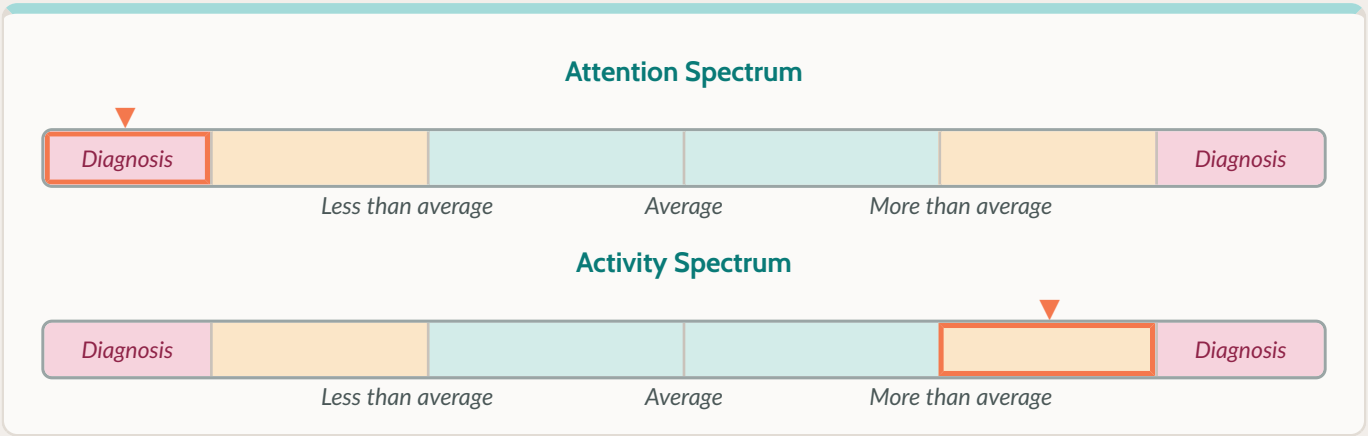
While these symptoms are often very common in both children and adults, those with ADHD must **also** meet the following criteria to qualify for the diagnosis:

- Onset prior to age 12 (*there is no scientific evidence of ADHD developing in adulthood*)
- Present in two or more settings (home, school, extra curricular activity, social settings)
- Clear evidence of significant difficulties in multiple settings

No child should be diagnosed with ADHD just because they are overly active or distractible!

To make an ***accurate*** ADHD diagnosis, a professional should collect information: 1) from the child and their caregiver(s) about the child's current and past functioning as well as developmental, medical, and academic history, 2) from current teachers (who have observed for at least six weeks) about academic performance and functioning at school, and 3) objective data (i.e., symptom checklists, rating scales). Additional information on intellectual abilities, neuropsychological abilities, and academic achievement are sometimes options as well.

Also, a diagnosis is only made if **FUNCTIONAL IMPAIRMENT** is observed... Basically, the symptoms are significantly impacting the individual. It is helpful to think about each symptom as a spectrum and a diagnosis is made based on the symptom causing the impairment. For example: you may have diagnosis level inattention, but with higher than average hyperactive → ADHD-I



The evaluator should also rule out medical and mental health conditions:

- ***Medical concerns*** - hearing, vision, sleep difficulties (e.g., falling asleep, staying asleep, lack of quality sleep), GI concerns as these can impact attention and activity level.
- ***Behavioral/mental health concerns*** - anxiety, depression, and stress/trauma (e.g., divorce, move, change in schools, other significant life events) because the effects on the body can mimic ADHD symptoms! While these concerns do coexist with ADHD (more on that later), it is important to consider whether these factors played a role for the symptom onset to determine the best plan of care moving forward.

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Understanding the ADHD Brain

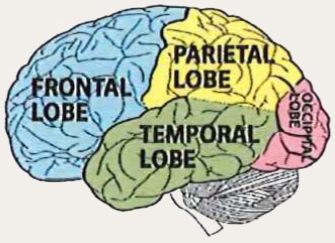
While the biological origins of ADHD are not clearly understood and no single cause has been identified, we do know that true ADHD is NOT *caused* by poor parenting, diet, or vaccines; however, evidence DOES suggest a genetic component and differences with brain structure.

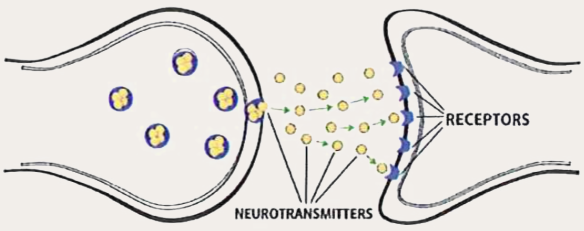
What we DO know is that the prefrontal cortex, which is home to our **executive functioning (EF)** skills, is implicated; therefore, ADHD often causes difficulties in the following areas:

1. **Inhibit** - ability to inhibit, resist, or delay an impulse (i.e., impulse control)
2. **Self-Monitor** - ability to assess the impact of own behavior to ensure goal completion
3. **Plan** - anticipate future events and develop steps to carry out a task/meet a goal
4. **Organization** - establish and maintain order, generally and within an activity
5. **Shift** - ability to change strategies during a task and to think flexibly
6. **Emotional Control** - ability to modulate emotional responses
7. **Initiate** - ability to begin a task or activity and to independently generate steps
8. **Working Memory** - capacity to hold information in mind, often requiring multiple mental steps, for the purpose of completing a task (e.g., multi-step directions)

Research shows that some structures in an ADHD brain are ~3-10% smaller in size (these regions eventually catch up), along with fewer neurotransmitters (chemical messengers of the brain) found in the ***reward center*** of the brain (i.e., Dopamine). This is important for two different reasons:

1. Reduced neurotransmitters may explain why those with ADHD struggle with delayed gratification and are able to focus on high-interest activities but struggle with more boring or challenging assignments that require higher-level thinking
2. **Maturity is about 2 years behind same-aged peers** given the 30% delay in developing executive functioning skills. This has NOTHING to do with intelligence, but may result in decreased maturity and emotional control, difficulties with independence and organization, and difficulties with maintaining friendships of same-aged peers.





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Associated Difficulties

While the aforementioned symptoms are ones needed to obtain the diagnosis of ADHD, there are many other associated and equally impactful difficulties:

- Increased anxiety and worries
- Increased sadness
- Heightened emotional responses
- Increased mood swings
- Oppositional and defiant behaviors
- Difficulties with self-regulation
- Difficulties with motivation
- Poor self-control
- Difficulties developing relationships
- Difficulties maintaining relationships
- Low self-esteem
- Easily bored
- Hyper-focus on stimulating activities
- Difficulties transitioning between tasks
- Difficulties with sleep quality/quantity
- "Weird" behaviors and immaturity
- Chronic lateness/ poor time management
- Poor motor control (fine, gross)
- Increased physical injury
- Increase motor vehicle accidents
- Variability in school/work performance
- Increased likelihood of substance abuse
- Increased likelihood of risk-taking behaviors (especially when *unmedicated*)

Coexisting Conditions

Given this understanding of the ADHD brain and symptoms common in ADHD, the following are **NOT symptoms of ADHD** but coexist with ADHD at significantly high levels:

Oppositional and Defiant Disorder

About half of kids become defiant, oppositional, and may have emotional and behavioral outbursts because of difficulties completing the task at hand given the desire to avoid and/or because they are having trouble shifting from a preferred activity to non-preferred activity.

Learning Difficulties

About 1/2 of kids have some type of learning difficulty, most common is problems affecting reading and handwriting. This may be due to the core ADHD symptoms, or may be due to the child needing a different learning style… either way, this is NOT due to intellectual capacities!

Mood Disorders

About 1/4 of kids with ADHD experience mood-related concerns like depression possibly because of feeling isolated, frustrated by failures and social problems, low self-esteem, as well as bipolar concerns due to rapidly changing moods, irritability, and aggression.

Anxiety Disorder

About 1/3 also have anxiety like *excessive* worry, fear, panic, physical symptoms (e.g., racing heart, stomachache, headache), obsessive-compulsive concerns, and motor/ vocal tics. This is explained by the nature of stressful, **uncertain** day-to-day life. Situations often resulting in consistent inconsistency, fueling ADHD-related anxiety.

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Treatment Options for ADHD

While research is continuing to pinpoint what causes ADHD, evidence-based treatment targets the impairment from core and associated symptoms. Treatment will not *cure* ADHD but will help reduce areas of functional impairment. Treatment plans should **always** be individualized to meet the person's specific needs, but will most often include a combination of medication options, school support, and evidence-based therapy.

The GOOD NEWS: with proper treatment, kids with ADHD can learn to manage their symptoms, regulate their behavior and emotions, and live SUCCESSFUL lives!!

Medication Options

Medications may affect individuals differently. When finding the correct treatment, medication trials with various dosages, often starting with a low amount working up to a more clinically effective dosage, is common (i.e., titration). Please note, medication is not recommended for under 6 years unless behavioral strategies are ineffective. It IS recommended that a parent always supervises the medication given risk of abuse. Below are the medication options:

Medications Types		Dosages	Possible Side Effects
Stimulant ***Used since 1960! Generally first choice!*	Methylphenidate *(Ritalin, Concerta)*	Short-Acting: 3-6 hours Long-Acting: 8-12 hours	Decreased appetite, upset stomach, irritability, headache, sleep disturbance, social withdrawal, dry mouth, restlessness, increased blood pressure and heart rate. ***No evidence of long-term side effects*
	Amphetamine *(Adderall)*	Short-Acting: 4-6 hours Long-Acting: 6-13 hours	
Non-Stimulant ***Often less effective, but an effective option!*	*Atomoxetine (Strattera), Clonidine, Guanfacine*	Long-Acting Tablet: 12 hours Long-Acting Capsule: 24 hours *May take couple of weeks to see effectiveness*	Difficulties falling asleep, upset stomach, fatigue, decreased appetite, dry mouth, dizziness, irritability, mood lability, headache, changes in heart rate

**Antidepressant medications are also an option for those with co-existing depression and anxiety.*
***These medications may not address all ADHD symptoms and will not change LEARNED behaviors... just make it less likely for physiological symptoms to interfere with implementation of interventions.*

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School Support

Public School Support

One of the primary places kids with ADHD struggle is at school, whether it is with academics, social interactions, and/or trying to maintain consistent control over emotions and behaviors across a long day. Therefore, kids with ADHD are eligible for special services/accommodations at school under the **Individuals with Disabilities in Education Act (IDEA)** and an anti-discrimination law known as **Section 504**. The goal of 504 plans is for students to be educated in mainstream classrooms with accommodations needed to be successful. Below is the process of establishing a 504 Plan for your child in the state of Texas:

1. Complete an assessment with a trained professional and receive a diagnosis letter.
2. Provide the school's **504 Coordinator** with the diagnosis letter. ***It is recommended that all correspondence be documented, even if it's a follow-up email to an in-person conversation (i.e., "per our conversation early today, the following was discussed...).*
3. Attend an **Admission, Review, and Dismissal (ARD)** meeting with the appropriate school staff to determine accommodations. Come prepared with accommodation options for your child (*see next page for examples*). Depending on age, it may be appropriate to include your child to teach them about their accommodations and improve self-advocacy skills. It is always recommended that accommodations be as concrete and clear as possible to avoid misunderstandings for all (e.g., child, parent, teacher, principal).
    - If disagreements arise during the ARD process, parents can make written appeals to the school district or the U.S. Office for Civil Rights.
4. Have a plan for communicating with the teacher about progress and interventions needed throughout the year, versus waiting until something is wrong... the 504 Plan should be reviewed and updated each year but consistent communication is best!
5. If it is felt that the 504 accommodations are not met:
    - Have a meeting with the classroom teacher to share specific concerns.
    - Talk to the principal to see if additional support is needed for the teacher
    - Talk to the 504 Coordinator to figure out if the accommodations are actually realistic. If so, they can work with the district to enforce it with the school. If not, they may help with rewriting the accommodation(s). Either way, agree on a timetable for that and follow-up with written documentation.
    - Talk to your state's parents' advocacy center to help gain additional information about how schools in your local areas have best enforced 504 plans.
    - Contact the U.S. Department of Education Office of Civil Rights... if all else fails, the Department of Education's site on protecting students with disabilities includes a contact page for finding the civil-rights office in your area or making a complaint online (https://ocrcas.ed.gov/contact-ocr).

> *If additional support is needed, the school may recommend an **Individual Education Plan (IEP)** that has the child receiving more intensive services in a different setting (e.g., special education).*

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Private School Support

Rights of children with disabilities differ between public and private schools due to state funding. However, if your child qualifies, they may be able to receive some special education services that are paid for by the public school district. Here are a few key things to keep in mind:

1. Federal law requires public school districts to look for and evaluate students who are suspected of having disabilities (i.e., **Child Find**; applies to public, private, and homeschooled). This means that you can request an evaluation that is paid for by the public school system (e.g., learning disability). If the district agrees to evaluate, it will be responsible for arranging and paying for these tests, but they may not agree…
2. **"Equitable Services"** are similar services that are provided in the private school systems, paid for by public funding, specifically for students with disabilities in the private school. However, funding is limited so fewer free services may be available in private schools.
    - "Service plan" is the similar equivalent to an IEP but often less comprehensive.
3. Public schools have strict guidelines for special education teachers but private schools may use different hiring standards and may not require specialized credentialing.
4. Private schools are usually willing to provide certain accommodations (e.g., extra time on tests, assistive technology) and may also allow your child to be tutored at the school by a private family-paid tutor.
5. Ultimately, the school district will decide which learning environment/special services are appropriate for the child they are assessing. In some cases, the district may offer other environments (e.g., "out-of-district placement") that are believed to be best for the child.

Example Accommodations for ADHD

As noted, many children with ADHD struggle in school and are allowed accommodations to help them be the most successful they can be often in the least restrictive environment. Below are example accommodations broken down by area of difficulty. Please note, kids with ADHD can be ashamed of being seen as "different" and may struggle to use accommodations due to worries about social feedback. Please also note that many of these accommodations are also meant to help teach kids skills to be successful in school with additional support meant to help them become more independent and successful with extra support.

504 Accommodations for MOST ADHD-Related Challenges

- **Increase positive reinforcement!!** Be on the lookout for positive behaviors. Provide labeled praises ("good job raising your hand" vs. "good job") and rewards for targeted behaviors. Rewards should be as immediate and tangible as possible to be effective.
- Use specific, brief, and written instructions whenever possible.
- Use positive and instructive comments for corrections; avoid giving public feedback.
- Avoid asking the child to perform a task in public that may be too difficult for them.
- Work with the team (parents, teachers) often to provide the best learning environment!

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Example 504 Accommodations for SPECIFIC Concerns

Difficulties with Assignment Completion

- Allow for extra time to complete work (in and/or out of class)
- Shorten or break large assignments into smaller parts (i.e., chunking)
- Schedule a 5-minute period to check work before turning it in
- Ensure the student writes down assignments and stores paperwork in a homework folder
- Track progress on long-term projects
- Avoid taking off points on less important areas of assignments (e.g., spelling)
- Allow for student to ask additional questions and explanations
- Teach good study skills that work with the individual's learning style (e.g., underlining, note taking, reading out loud, using technology to help with tasks)

Distractibility

- Ask questions to encourage participation
- Avoid seating distractions (i.e., preferential seating)
- Develop private, non-verbal signal to refocus attention
- Have lessons be short and include visual and auditory aids

Organization

- Set up binder with dividers, folders, and color-coding (e.g., accordion binder)
- Assign partners to double-check each other's assignments
- Allow student to keep an extra set of books at home

Fidgety, Hyperactive, Restless Behaviors

- Allow students to stand at desk or use an exercise ball when working
- Provide multiple short breaks (i.e., 5- to 10-minutes) throughout the day
- Allow the use of discreet fidget toys

Impulsivity

- Visual rules in the classroom for clear expectations
- Tape targeted behavior cards to the child's desk (e.g., raise hand to ask questions)
- Give transition warnings during activities (5-, 3-, and 1-minute warning)

Social Challenges

- Allow for one-on-one social modeling
- Teacher-directed group activities to reinforce appropriate social interactions
- Praise student's talents in front of classmates
- Arrange for social skill groups
- Work with the student to gradually build skills in areas of weaknesses (i.e., scaffold)

Disruptive Behavior

- Acknowledge answers only when hand is raised and student is called upon
- Set up a behavior contract with a token system, if appropriate
- Daily report card for parent-teacher communication (not to place student as messenger)
- Consider recording/documenting cases, if possible
- Have children repeat instructions back to you to ensure translation

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Psychosocial/Behavioral Therapies

There are also various types of treatments for ADHD aimed at improving parent and child strategies for specific areas of concern. Below are various *evidence-based* treatment options:

- **Behavioral Therapy**
  - **Parent Management** - teaching parents how best to set-up a child's environment and respond to their behaviors by assessing the function of behaviors, changing negative attention-seeking cycles, increasing positive reinforcement and parent-child relationships (e.g., labeled praises, rewards), and providing consistent discipline strategies (e.g., consistent time out sequence, removal of privileges).
  - **Behavior Modification** - a facet of Cognitive Behavioral Therapy (CBT) meant to help learn strategies to change maladaptive habits and replace them with more functional responses by addressing the antecedent (what happens beforehand) and/or consequences (our reaction to their actions). We can also shape behaviors with contingencies that encourage a desired behavior attached to a reward (e.g., "if...then...") by ourselves or through a behavioral contract with parents.
- **Social Skills Training** - teaching children how to use social skills and prevent interpersonal difficulties by improving areas such as problem solving, emotional control, and verbal/non-verbal communication in various settings with various types of people (e.g., adults, children, people with disabilities) to help with generalizability of skills.
- **Organizational Skills Training** - teaching parents and students how to best address deficits in their executive functioning such as organization of school materials, time management, planning, etc. (*see above for additional EF components explained*)
- **Occupational Therapy** - address fine and gross motor skills that may cause impairments in various areas of functioning (e.g., academics, sports).

Please note, all above therapies are meant to be short-term, goal-oriented, and should include parents despite age to help scaffold success!

Treatments with INSUFFICIENT Evidence

Below are treatments aimed at addressing areas of concern for ADHD but **WITHOUT** sufficient scientific evidence to confidently state that it can help majority of those with ADHD:

Vitamins and supplements	Diet changes	Allergy treatments
Chiropractic treatment	Attention training	Visual training
EF coaching	"Talk" psychotherapy	Essential Oils
Cognitive Therapy	Mindfulness	EEG Biofeedback

Always be wary of a treatment labeled as a "cure" for ADHD!

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Recommendations for Parents of Kids with ADHD

- Establish a **DAILY ROUTINE** for activities like mealtimes, bedtime, wake time, and chores with visual checklists for weekdays AND weekends… consistency is key!!
- Give multiple transition warnings ("5 minutes to dinner… 3 minutes… 1 minute").
- Eat healthy food like fruits and vegetables, and avoid junk food.
- Never shame your child for their difficulties (e.g., slow processing, misuse of words). Even laughing at their cuteness may be mistaken by the child as you making fun of them.
- Involve them in extracurricular activities (e.g., music, sports, hobbies) to identify personal areas of strengths that mastery can be built off of, increasing self-confidence.
- Teach social skills and role play everyday situations to allow your child to practice these skills in a more safe environment.
- Limit choices by offering two allowed choices to reduce feeling overwhelmed.
- Give one or two simple instructions at a time.
- When working on a specific behavior, focus on changing the most problematic behavior first using charts and graphs to assess progress and barriers… avoid working on too much.
- Prompt-monitor-praise-reward sequence for specific behaviors with fading rewards and thinning prompts over time as success is demonstrated.
- Avoid distractions (TV, radio, cellphone, computers) especially during non-preferred tasks Break down large tasks into multiple, smaller steps (i.e., chunking).
- Get organized! Assign a "home" for objects (e.g., school bags, clothing, toys) and overpractice so your child will be less likely to lose/forget them.

- Provide immediate **labeled praises** ("good job first time listening" vs. "good job"). Aim for 5 praises to every 1 negative interaction.
- Increase **rewards** for targeted behaviors. Rewards should be as immediate and tangible as possible. Expectations should be concrete, brief, and clear!
- Schedule "one-on-one" time for you and your child to do things they find FUN.
- Help your child discover their talent/strengths to increase confidence, success, and esteem!

- Instead of yelling, threatening, talking, use time outs for young children and loss of privileges for older children.
- House rules (2-3 max) and structure are a necessity… visual lists are best!
- Enforce rules once you have set them and Be CONSISTENT!
- Utilize other strategies like redirection and selective attention for challenging behaviors that are not being targeted but are not safety-related.
- Natural consequences are important part of discipline and expected to occur.

★ **Be kind to yourself!!** Parenting a child with ADHD brings special challenges, especially as many parents also struggle with similar ADHD-related symptoms. Learn as much as you can about ADHD from reputable sources, get plenty of social support, take breaks, give yourself grace, and seek professional help for your kid, or yourself, when needed!

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Additional Resources

Children

- *Putting on the Brakes: Young People's Guide to Understanding Attention-Deficit/ Hyperactivity Disorder* (Quinn & Stern, 2001)
- *Learning to Slow Down and Pay Attention: A Book for Kids about ADHD* (Nadeau, Nixon, & Beyl, 2004)
- *Thriving with ADHD workbook for kids* (Kelli Miller)

Adolescents

- *A Bird's Eye View of Life with ADD and ADHD: Advice from Young Survivors* (Ziegler, Dendy, & Ziegler, 2003)
- *Helping Adolescents with ADHD and Learning Disabilities* (Judith Greenbaum and Geraldine Markel)
- *Putting on the Brakes: Young People's Guide to Understanding Attention Deficit Hyperactivity Disorder* (Patricia Quinn and Judith Stern)

Parents

- *Taking Charge of ADHD: The Complete, Authoritative Guide for Parents* (Russell Barkley)
- *ADHD: What Every Parent Needs to Know* (Michael Reiff)
- *Essential Guide to Raising Complex kids with ADHD, Anxiety, & More* (Elaine Taylor-Klaus)
- *Improving Children's Homework, Organization, and Planning Skills* (Joshua M. Langberg)
- *Smart but Scattered: The Revolutionary "Executive Skills" Approach for Helping Kids Reach their Potential* (Richard Guare and Peg Dawson)
- *Driven to Distraction* (Edward Hallowell and John Ratey)
- *ADHD Book of Lists* by (Sandra Rief)
- *Straight Talk about Psychiatric Medications for Kids* (Timothy Wilens)
- *Helping Adolescents with ADHD and Learning Disabilities* (Judith Greenbaum & Geraldine Markel)

Websites, Videos, and more

- CHADD.org*
- Kidshealth.org/en/parents/adhd.html*
- Adhdnews.org
- Aacap.org/AACAP/Families_Youth/Resource_Centers/ADHD_Resource_Center/*
- CDC.gov/ncbddd/adhd/index.html*
- Healthychildren.org/English/health-issues/conditions/adhd*
- Psychiatry.org/patients-families/adhd/what-is-adhd
- ImpactADHD.com
- Childmind.org/topics/adhd-attention-problems/*
- Understood.org/en/articles/what-is-adhd
- How to ADHD Youtube Channel - www.youtube.com/c/HowtoADHD

** = Citation/Reference for guide's information, including images used*

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