

ADHD

.....
IN MIDDLE SCHOOLERS



The Boston Children's Hospital Guide for ADHD in Middle Schoolers

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For new readers, welcome!

For readers of our earlier guides, welcome back!

For some of you, Attention-Deficit/Hyperactivity Disorder (ADHD) may be a new diagnosis. Others of you may have been living with the diagnosis for quite some time. The teen years can be equally wonderful and anxiety-provoking, with or without ADHD. These are the years during which youth explore their sense of self, find their circle of friends, and start thinking about the future. Teens both with and without ADHD often have strong feelings and opinions, and are prone to risk taking. With this guide, we want to help young teens navigate the unique opportunities and challenges that arise during the middle school years.

Introduction to “Picking Up the Baton”



This guide contains information and tips for caregivers and middle schoolers to help them start achieving independence. We encourage your child to read the “Picking Up the Baton” sections throughout this guide.

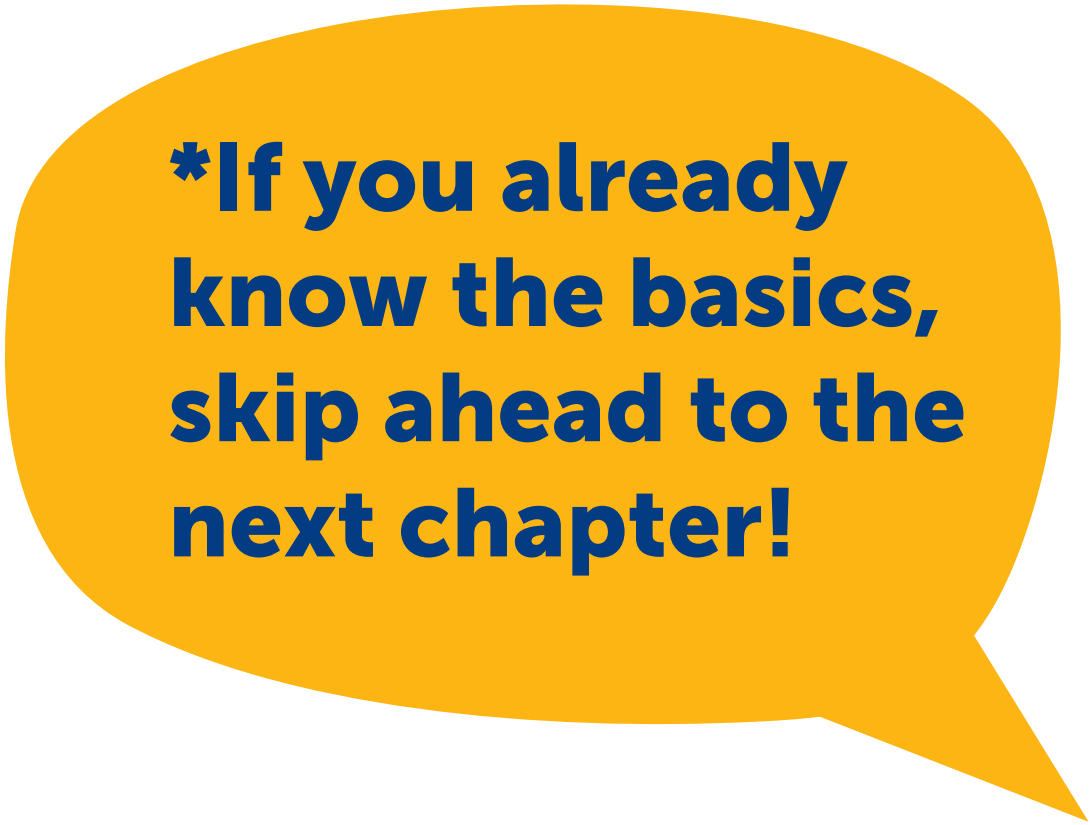
As children develop physically, cognitively, and socially, they become increasingly more independent. Individuals with ADHD may have greater challenges gaining independence due to symptoms of inattention, impulsivity and hyperactivity. While your middle schooler builds mastery and independence with various life skills, it's important that:

1. Children develop independent living skills
2. Caregivers stay in the picture and slowly increase their child's level of responsibility. We call this process “fading support.”

For these reasons, this guide contains information for caregivers and young teens (yes, your child has entered the teen years!). You're both encouraged to review the “Picking up the Baton” sections, which include tips specifically geared towards your middle schooler.

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***If you already
know the basics,
skip ahead to the
next chapter!**

ADHD: The Basics

ADHD is a neurodevelopmental disorder that causes people to have trouble regulating their attention and behavior. ADHD is the most common neurodevelopmental disorder in childhood. It affects 6-12% of school-aged children.¹

ADHD can impact many areas of your teen's life. There are 3 ways it can affect behavior: ²

- **Inattention:** having difficulties paying attention and following through with tasks or instructions, being disorganized and forgetful, and having poor attention to detail
- **Hyperactivity:** may include excessive energy levels, talkativeness, restlessness, and fidgeting
- **Impulsivity:** acting before thinking, difficulty with self-control of emotions and behaviors, and difficulty with delayed gratification (wanting things now)

What are the types of ADHD?

How your child's ADHD looks will likely change as they grow and develop:

- **Predominantly inattentive:** Those with this type have at least 6/9 inattentive symptoms and fewer hyperactive-impulsive ones. This can include difficulty starting tasks and trouble paying attention, especially when they're asked to focus on a less preferred activity for a longer time (like a history lecture or reading). Or, they may focus *too much* on rewarding activities, like video games, and have trouble transitioning away from these preferred activities.
- **Predominantly hyperactive/impulsive:** Those with this type have at least 6/9 hyperactive/impulsive symptoms. They may be impulsive, very active, often fidget, talk a lot (or over people), grab things out of other people's hands, and interrupt conversations. They are often impatient and have difficulty waiting. As they get older, teens might speak out of turn or say things without thinking of the consequences.
- **Combined:** Those with this type have both clinically significant inattention and hyperactive/impulsive symptoms. This is the most common subtype of ADHD.³

How is ADHD diagnosed?

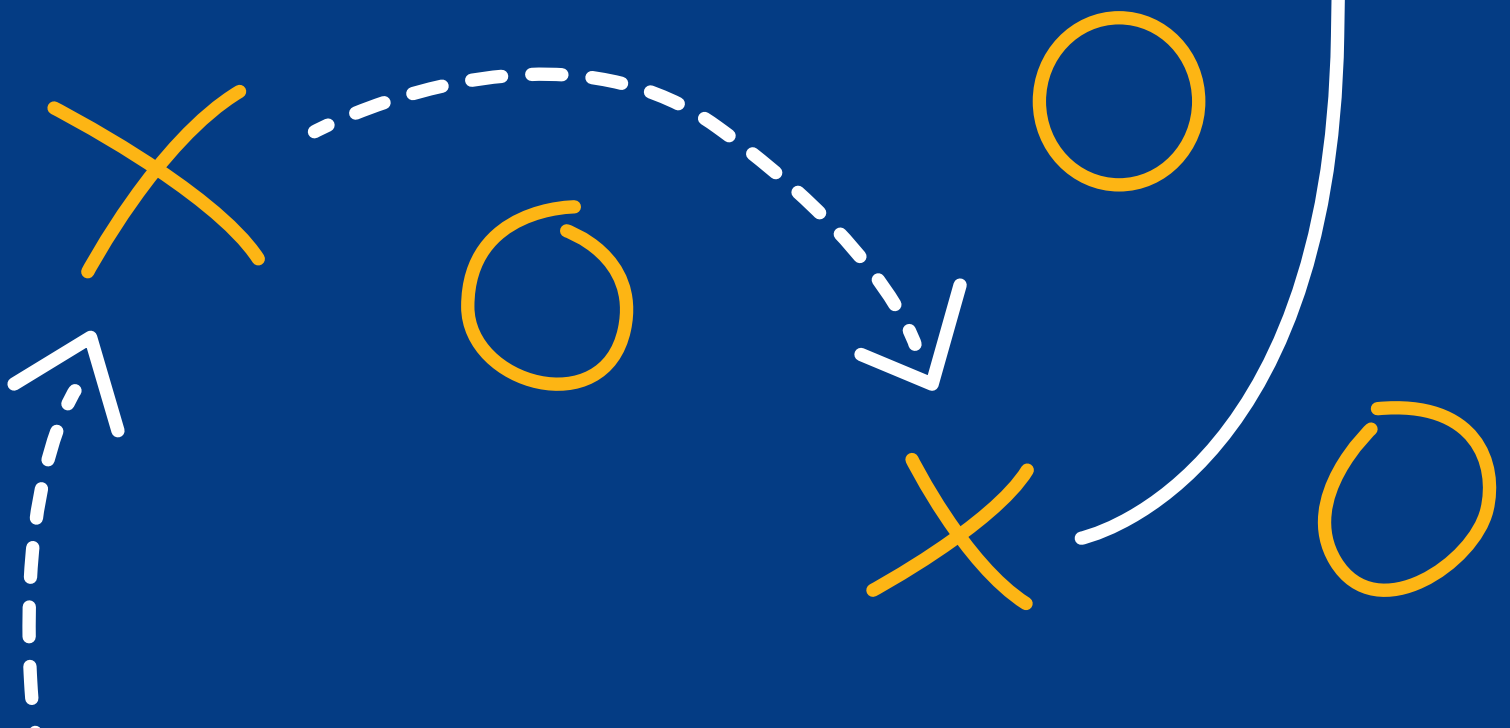
- For a diagnosis of ADHD, symptoms are present before age 12 and occur in 2 or more settings. All people display hyperactive, impulsive, and inattentive behaviors at times. But those with ADHD tend to show these symptoms to a higher degree, and it affects their day-to-day functioning.
- We often use rating scales and behavioral observations to assess ADHD symptoms.
- We also use reports from parents and other adults involved in your child's care (like teachers and counselors).
- ADHD isn't diagnosed using blood tests, brain imaging, or by tracking eye movements.

How is ADHD treated?



Treatment is a partnership between caregivers, teachers, clinicians ... and your child! Professionals will make recommendations, but young teens and their caregivers are the "team captains," and it's this team approach that will help your teen succeed. As children mature, we want them to take on more responsibility or take on the "captain" role of their team – it's their life and healthcare after all!

On the next page, we outline how treatment starts to shift from family-focused to individual-focused, and what you can expect at each developmental phase:





Developmental Phase

Preschool/Elementary

Upper Elementary / Middle School

Behavioral Interventions

- Mostly implemented by parents and teachers, with coach/professional support.
 - Strategies focus on attending to and rewarding desired behavior and selectively ignoring problem behaviors (so long as nobody is getting hurt).
 - Two commonly used evidence-based strategies for this age include (but are not limited to) token economies (“sticker charts”) and visual schedules.
 - Commonly referred to as: Parent Training in Behavior Management, Behavioral Parent Training, Parent Management Training or Contingency Management.
 - School-based supports are frequently called Positive Behavior Plans or Positive Behavioral Intervention Plans.
 - Regular exercise and staying active can help maintain focus and “burn off” extra energy at all ages.
- Behavior management and positive behavior plans continue, but target behaviors will start to include executive functioning skills (organization, time management, planning).
 - Token economies, sticker charts and visual schedules can still be effective, with modifications based upon developmental age and target behaviors.

Medication

The first-line medication is frequently a *stimulant medication*, including methylphenidate (like Ritalin and Concerta) and amphetamines (like Adderall), that help children with ADHD to be more focused and less active. These medications typically last long enough to get through a school day. “Booster” doses and extended release options are available for homework time and after school activities. Common side effects include reduced appetite, trouble falling asleep and sometimes headaches and an upset stomach. Talk to your child’s prescribing provider about these effects and how to best manage them.

Non-stimulant medications include alpha agonists, like guanfacine and clonidine, which are good for managing explosive behavior, and medicines like atomoxetine (Strattera) and viloxazine (Qelbree), which can be helpful as an alternative to stimulants.



High School



Young Adult

- At this age, responsibilities of treatment management shift from parents to teens.
- Parents continue to provide oversight and support.
- Executive function coaching can be particularly helpful at this age, often done by direct instruction at school or individual therapy.
- Cognitive behavioral therapy, motivational interviewing, and other third-wave CBT treatments may help to address any co-occurring conditions that may be interfering with progress towards independence.
- At this age, interventions emphasize “fading support” to give teens the opportunity to practice new skills independently.

We want to empower teens to communicate directly with their prescribing providers about how the medications affect their functioning. Teens should also start to take ownership over taking their medicine on a regular schedule.

- By this age, teenagers become more independent.
- Start to allow your teenager to manage their time and schedules.
- Reward systems shift toward “self-reinforcement,” with the young adult rewarding themselves after completing demanding activities (like term papers), by scheduling preferred activities.
- Young adults are more responsible for their choices and actions, but some may need continued guidance to navigate new challenges, such as job skills.

We want young adults to be attuned to how the different kinds of medications affect their symptoms and which ones give them the best benefits with few or no side effects.

Behavioral interventions often used with teens are study skills training and executive function coaching. These interventions include direct instruction to learn and gain independence with organization, time management and planning. Examples include (but are not limited to): keeping a daily schedule, minimizing distractions, rewarding positive behavior, using charts and checklists and limiting choices.¹ You may work with your teen's provider to identify ways that they can structure and scaffold supports at home. These strategies can be formalized through 504 Plans or IEPs at your child's school.

Medications used to treat ADHD fall into 2 groups: stimulants and non-stimulants. The decision to take medication is based on your teen's age and their symptoms. When deciding to begin a medication, your teen's prescribing clinician will talk to you and your teen about the goals of treatment, side effects and strategies for managing any side effects – including adjusting the medication plan if needed.⁴ You, your child, and their prescriber will be in regular communication about how medications are working.

Some side effects can be mild, like a headache or reduced appetite. "Mild" implies that the side effects can be "worked around." For example, your child could have high-calorie breakfasts and dinners to offset a reduced appetite at lunchtime. Other side effects may not be mild, like a change in mood. Side effects that negatively impact quality of life, like not being able to fall asleep or explosive mood swings when the medicine wears off, require changes to the medication plan.

Tools to help

- Educate your child about ADHD medication with the help of their prescribing physician. For example, they should learn the name(s) of their medication and when and who to call to get refills.
- Have a discussion with your child about responsible use of medication, including the risks associated with misusing medication and the serious consequences of giving/selling their medications to peers.
- Encourage your child to ask questions or raise concerns about (a) potential changes in symptoms, (b) symptoms that need to be managed and (c) side effects.
- Create a reminder system. A few options include (but are not limited to):
 - › Place a pill box with days of the week in a common area
 - › Set an alarm on their phone
 - › Use medication reminder apps (MediSafe Free Pill Reminder, Rx and Medication Tracker (medisafe.com))
 - › Have them wear watch with alarms (Watchminder)
(Maitland, 2018: ADDitude Magazine)

What long-term impact can ADHD have on my teen?

People with ADHD often have many strengths that can shine in the right setting, including their creativity, resiliency, and abundant energy. On the other hand, ADHD symptoms can interfere with academic performance, relationships (friends and family), extracurricular activities, and independence. Functioning in these areas can be further affected by co-occurring conditions, such as specific learning disorders and anxiety. Though scary to think about, knowing these potential challenges and risk factors will help you identify, plan, and minimize their impact (or even avoid them entirely).



Learning

People with ADHD are more likely to have academic challenges. About 20–60% of children with ADHD also have a specific learning disability (SLD). Learning difficulties may become clearer in high school because demands increase. Educational interventions/supports can be designed to offset any learning difficulties and to help your child reach their academic potential.



Risky behaviors

As children become more independent, they may engage in risk-taking behaviors. Though risky behaviors are a typical part of adolescent development, teens with ADHD are, on average, more prone to impulsive and sensation-seeking behaviors. Keeping open lines of communication with your teen can be helpful to balance giving them the independence they want while keeping them safe. Two of the most common risky behaviors in teens are also addressable: substance use and unsafe driving.



Substance use

People with ADHD are at increased risk for substance use disorders.⁸ This increased risk seems to be related to ADHD symptoms and not to stimulant medication. In fact, some research suggests early treatment of ADHD and other co-occurring mental health concerns with pharmacotherapy, behavioral interventions, and cognitive behavioral therapy (CBT) has been shown to reduce the risk of substance use.



Peer pressure and medication

Those with and without ADHD misuse stimulant medications. Some people may feel pressured to sell or give away their prescribed stimulants to friends. It's a good thing for your child to become more responsible and independent about taking care of their health. At the same time, it's important to talk to your child about safe and responsible use of medication.

Tools to help

- Educate your child about the use of legal and illegal drugs and emphasize that it's not safe to drink alcohol or smoke/vape.
- Talk to them about stimulants and explain the risks involved when combined with other substances. Stimulant medications are controlled substances and should be taken only as prescribed by a healthcare provider.
- Educate your teen about the responsible use of stimulant medications and consequences of misusing them.
- Make sure that your teen's medications are safely stored.
- Talk with your teen's school about the medication they're taking.
- Help your teen understand that it's illegal to share their prescribed medication.



Picking up the Baton: Treatment

To help you become independent with your ADHD treatment, you should participate *as much as possible* in meetings and treatment discussions with your treatment team. Ask questions during these meetings to make sure your concerns are being addressed and that you understand your treatment plan.

School: Try to meet with your teachers and support staff at school to ask for the supports and services you might need. This includes 504 and IEP meetings.

Health: You may want to meet privately with your prescribing physician, such as your pediatrician or psychiatrist, to start to learn about your medications. Knowing about your medications will help you collaborate with your provider(s) and find a plan that works for you. Other medication tips:

- Having a pill box listing each day of the week can help you take your medication(s) regularly.
- Don't share your medications with other people. Your medication has been prescribed just for you. It could be harmful to take your medication.
- ADHD medications can interact with other medications (like common cold medications), so make sure you check with your doctor before taking new medications.
- Remember, it's not safe for you to drink, smoke, or vape, especially because you may be taking ADHD medications.

The future

It's important that we close this section by reminding you that risks don't mean they'll necessarily happen. Yes, it's scary to hear about the risks that children with ADHD have for potentially serious consequences. But your child is also much more than these risks. In fact, many go on to become happy and successful adults! And recent research suggests that risk-taking can also be *positive*, such as a teen standing up for a person being bullied. One important protective factor in their wellbeing is you, the caregiver! Talk to your teen about risks and work together to problem-solve any foreseeable challenges. You play an influential role in your child's life, and believe it or not, they still listen to you.

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Executive Functioning

Executive functioning (EF) is the collection of skills that allow us to organize our thoughts, regulate our emotions, prioritize our goals, maintain our motivation and much more. EF is like the “boss” of the brain and helps to manage other brain (cognitive) functions. EF occurs mostly within the frontal lobe of the brain (specifically the *prefrontal cortex*) with connections to other brain regions to support goal-directed activity. This brain region, along with corresponding structures, has its biggest “growth spurt” between adolescence and early adulthood. This promotes the development of EF skills that occurs in many teens. Most teens and young adults with ADHD have challenges with at least 1 area of EF.

There are many models of executive functioning.^{1,2} Though there are some differences between models, most include the following core functions: inhibition, working memory, and cognitive flexibility. Inhibition and working memory are among the first EFs to emerge, usually beginning around preschool. Cognitive flexibility skills mature later (school age to adolescence) and build upon the foundational skills of working memory and inhibition.

Core Executive Functioning Skills

EF Skill	Definition	Challenges associated with this EF Skill	
Inhibition (Cognitive/ Mental and Behavioral Inhibition)	Ability to stop automatic or dominant responses and to control one’s behaviors, emotions, and thinking	<ul style="list-style-type: none"> Overreacting to criticism and feedback Inappropriately blurting out comments, may be perceived as disrespectful or “hotheaded,” especially when frustrated Susceptible to peer pressure without thinking of consequences 	<ul style="list-style-type: none"> Risky behavior, like reckless driving and substance use Easily distracted (difficulty blocking out distractions) Difficulty focusing on one project (often starts multiple projects, but doesn’t complete them) Difficulty with re-learning or learning to complete tasks in a new way
Working Memory (Visual and Verbal Working Memory)	Ability to remember/hold information in the mind to “work” with it	<ul style="list-style-type: none"> Easily forgets multi-step directions Quickly forgets what you just told them (verbal) or what they just read (visual) Difficulty keeping track of items 	<ul style="list-style-type: none"> Difficulty taking class notes due to difficulties remembering what they heard/saw to write it down on paper Difficulty completing mental math (math calculations in their brain)
Cognitive Flexibility	Ability to shift or alternate thinking between different concepts or ideas	<ul style="list-style-type: none"> Difficulty multitasking or switching between different tasks; may get frustrated or overwhelmed by “too many things at once” Difficulty adapting or changing their thinking to new situations Difficulty shifting between tasks (may get hyper-focused on something they like to do) 	<ul style="list-style-type: none"> Difficulty understanding and identifying multiple solutions to a problem (may think there is only “one way”) Difficulty with perspective taking or understanding that another person may have different feelings and thoughts, which can lead to arguments or misunderstandings with peers and adults

Skills Closely Associated with Executive Functioning

EF Skill	Definition	Associated Challenges
Metacognition	"Thinking about your Thinking" or awareness of your thoughts	May lack insight into thoughts, feelings, and behaviors (and how these are connected with one another)
Self-Monitoring	Awareness of your behaviors/actions and whether your behaviors are effective for the current situation or activity ("reading the room" and adjusting behavior)	Not understanding the effect of current behavior on other people (therefore unable to adjust behaviors to match the situation)
Problem-Solving	The ability to find solutions to new, difficult, or complex dilemmas or situations	Difficulties coming up with new solutions or strategies when old ones fail
Organization	Maintaining order, structure, and neatness in one's surrounding and belongings	Messy bedroom/locker at school; often misplaces/loses belongings
Initiation	Starting tasks independently with enough time to get them done (not delay or procrastinate)	Procrastinating on tasks, especially those that are non-preferred (school assignments, college essays), and often needing reminders to start tasks
Planning	Preparing for future tasks and activities	Missing necessary materials for a task (forgets to do laundry before a trip; forgets homework binder)
Prioritization	Focusing on important tasks first	Engaging in preferred activities (spending time with friends) at the expense of non-preferred (but important) tasks/responsibilities
Time Management	Accurately estimating the time needed to complete projects	Being late, losing track of time, handing assignments in late, staying up too late

Other Related Skills

EF Skill	Definition	Associated Challenges
Self-Regulation	Ability to control emotions and behaviors to achieve goals and to complete tasks	"Emotional impulsivity": quick to anger; big reactions to small problems, saying hurtful things without meaning them
Attention/Concentration	Focusing and paying attention to the activity needed to complete it <i>Sustained attention: maintaining focus and ignoring distractions</i>	Easily distracted and has difficulties with focus



Picking up the Baton: Executive Functioning

These strategies may help you succeed at home, at school, and in extracurricular activities:

- Create a daily visual schedule that includes both work time and short “brain breaks” to help maintain attention. Timers can give you clear cues regarding the duration of work and break periods.
- Use a calendar that also includes whole-family events. Calendars can be a great way to visualize schedules and activities.
- Create an organizational system for class materials. Planners are great systems to manage work and to keep track of appointments. In addition to paper/pencil planners, electronic planners and task management systems are available through Google calendar (integrated with GoogleTasks), or with organizational apps.
- Keep a to-do list on a centrally placed whiteboard or an electronic to-do list (like GoogleTasks) to help you remember tasks. Check items off the list once you complete them!
- Break larger tasks into smaller goals (step-by-step written checklists).
- Create a homework space that’s free of distractions (no electronics or clutter).
- Use reading supports, such as reading windows, to help you maintain focus.
- Include rewards in your schedule. For example: “When I complete task X, I can take a 10-minute break to watch a YouTube video/call a friend/sit in the sun.”
- For specific app recommendations, explore ADDitude Magazine’s top organizational apps of the year.

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Behavior in Young Teens with ADHD

As children develop into adolescence and beyond, they begin to take on more independence and responsibility for their lives. **Although young teens start to desire more independence, they still need parental supervision, scaffolding, and guidance.** They also benefit from continued support with navigating behavioral, social, and emotional challenges. This is especially true for teens with ADHD who might struggle with feeling bored or overwhelmed by school/work, increased oppositional behaviors and rebelliousness, and/or lower self-esteem.

Below are some suggestions for how to help your teen avoid or manage some of these challenges. The ultimate goal is to enhance your teenager's social and emotional wellbeing.⁷ These strategies can be implemented at home, as well as with support from a therapist, teacher, or physician.

Acknowledge positive behaviors (“catch them being good”)

Behaviors are often shaped by the way adults and peers respond to them. Adaptive behaviors are often motivated by positive feedback from those around them. On the other hand, undesired behaviors can be maintained by negative attention. Giving positive attention will motivate your teens to do the same adaptive behavior again.^{8,9} So, it's even more important for the adults in their life to pay attention to the things that they do well.

Praise

Most of us enjoy receiving attention for the good things that we do. When a desirable behavior is acknowledged through labeling or praise, it's more likely to happen again. Giving teens praise and words of encouragement can be helpful

reminders to start and follow through with tasks. Praise, in the form of encouragement, can also help to boost their sense of accomplishment, especially on tasks that they don't like and/or are hard to do.^{7,9,10}

Additional tips to increase the effectiveness of praise include^{7,9}:

- Give praise immediately after your teen completes a desired/adaptive behavior (like completing chores or working on academic tasks).
- Be specific. For example, “That’s a great idea to write down your homework assignments.”
- Keep praise short. For example, “Thanks for setting the table!”
- Be enthusiastic and excited about their efforts.
- Be genuine – be sincere and authentic with praise. Teens are keenly attuned to tone and are quick to react when they feel that they’re being patronized.
- Provide praise in different ways. Teens may appreciate a nonverbal cue, such as a smile or a written note.
- Focus on your child’s effort, not just the outcome. For example, “I’m so impressed with your determination on this task!”
- Be consistent and unconditional. Conditions, such as “Nice job, now if only you would...” neutralizes the benefits of the praise by putting the teen on the defensive.
- After your teen gains new skills, begin to praise new challenges to encourage continued development.

Rewards

Many people are motivated by rewards – whether social (such as praise, listed above), tangible (items, money), or privileges (access to screens). What motivates your teen depends upon their preferences, so check with them about what they're interested in earning.

The **Premack Principle** is another rewards-based strategy, in which a lesser preferred task is completed before earning a more preferred one. For example, you might give your teen a few chores to complete after school. When all the chores are done, they may earn their preferred activity, like screen time or time to be with friends.

People with ADHD often choose immediate rewards, and they struggle with delayed gratification, even if the later reward is bigger than the immediate one.¹⁰ A token economy is a tool to help motivate your teen to wait for the larger reward associated with pursuing later goals. A **token economy** gives a person a sooner, smaller reward that they “bank” toward a later, larger reward. Each “token” is a way for you to acknowledge, track, and reward preferred behavior and helps teens feel a sense of accomplishment as they work toward their goal. For example, each time your teen completes chores or shows a desired behavior, they can accrue points toward a preferred activity (like watching a show or video game time). Or, they can earn a small amount of money for each completed chore that they bank toward a larger purchase (like an outing with friends or a new video game).

Positive phrasing

Try to use positive language for what you *expect*, *want*, or *appreciate* from your teen, rather than using corrections or negative feedback that draws attention to what you don't want them to do. For example, you can say something like, “I need you to finish clearing the table,” instead of “Stop looking at your phone.” Positive language provides your teen with clear expectations, instead of simply the absence of a behavior, which can feel punitive and confusing.

Ignore negative behaviors

Our brains have a negativity bias, selectively attending to and remembering negative things more often than positive ones. So, it's common for teens with ADHD to receive frequent negative feedback and criticism for challenges, such as forgetting schoolwork or losing track of time. Yet this negative feedback does little to motivate a teen with ADHD, and in fact negative attention from adults can unintentionally reinforce problem behaviors.

One sign that a behavior may be motivated by this negative attention is if the behavior increases when another person yells, scowls, or sternly corrects. Ignoring these types of behaviors, over time, makes them happen less. If no one is getting hurt, the behavior can likely be ignored. Realize, however, that the behavior may worsen when initially ignored before it gets better. This is called an **extinction burst**.

Note: Active ignoring is paired with **selective attention** (that is the “active part”!). Pay attention to and praise good, appropriate behaviors that follow.

For example: “Thank you for calming down and doing your chores.”

What if these behaviors are unsafe?

Unsafe behaviors including physical aggression, verbal aggression, substance use, unsafe driving, and risky sexual behaviors put teens and others in danger.⁹⁻¹⁰ These behaviors **cannot** be ignored and need an adult's response.

When challenging or defiant behaviors arise:

- Remain quiet, calm, and neutral. If you need to talk, use a calm/neutral voice and keep statements short and to the point. Remember, yelling is a form of attention and may escalate emotions and behaviors.
- If your teen is aggressive, stand next to them. Standing face-to-face can be perceived as threatening and can increase aggressive behaviors.
- Be consistent. If you react some of the time and not others, teens might escalate with the hope that they eventually achieve their desired outcome.
- When your teen is calm, compassionately talk to them about ways to problem-solve the future. Let your teen know that you understand why they feel the way they do through validation. "I understand that you're angry that you aren't allowed to drive for 2 weeks because you got a speeding ticket. I'm worried about your safety, which is why this is a house rule for driving. Let's brainstorm things that you can do differently."
- Talk with a professional if you regularly have arguments that could escalate into an unsafe situation. This may be the sign of an underlying mental health issue, like depression.

Tips

Redirect

Offer another activity for the teen to do instead.

Example: Your teen is arguing with their father. Instead of asking the teen to stop, ask them to help you make dinner.

Provide forced choice

Provide 2 or 3 options for them to choose from. This gives them some control in a decision.

Example: Your teen is stalling about doing chores. Offer them a forced choice ("Do you want to clean your room or take out the trash first?")

Replace the behavior

Replace the undesired behavior with something else.

Example: Your teen is repeatedly tapping his fingers on his desk. Give him a fidget to keep his hands busy.

Natural and logical consequences

Research shows that positive behavior management strategies, including rewards and praise, are most helpful for motivating appropriate, desired behaviors. However, sometimes discipline or **mild** punishment is necessary in response to challenging or unwanted behaviors.

Note: Harsh discipline/punishment often negatively affects a teen's emotional wellbeing, can increase challenging behaviors and worsen the parent-teen relationship. Harsh discipline practices are **not** recommended.^{7, 10}

Natural and logical consequences help teens be responsible for their actions and learn from their mistakes.

Natural consequences are the result from a teen's action or inaction. For example, if they forget to bring their favorite shirt to the laundry room, they can't wear their favorite shirt to school.

Logical consequences are when the parent provides a consequence in response to a teen's action/inaction. For example, if they break their phone, they do chores to make up for the cost of replacement.

Consistency

Everyone benefits from consistency, and this is especially true for people with ADHD. It's helpful to be consistent following through with behavior management strategies as much as possible. Inconsistency in rules and plans often makes it difficult for someone to know what you expect, what is rewarded and what they should do. So, "pick your battles" and focus on a few behaviors you want to change. Targeting too many things at once will overwhelm you and overwhelm and confuse your teen.

It's also helpful to be consistent with rules, routines and schedules. You can't control every situation, but there are ways to make the day more predictable. If you expect major changes in schedules, like a family vacation or a doctor's appointment, go over the changes ahead of time.



Picking up the Baton: Rewards

Everyone deserves praise and rewards for their hard work. Consider ways how you can reward yourself for the hard things you do. For example, reward yourself with playing a video game after you do some homework. You can also think of ways to motivate yourself to do less-preferred, but necessary tasks, like meeting up with a friend to study or creating a countdown calendar toward graduation.

Tips

- Meet with your teen and agree upon the consequence for recurring behaviors.
- Periodically, remind your teen of rules and rewards/consequence systems.
- If appropriate, offer a choice to change their behavior. For example, “If you don’t clean your room, you won’t be able to go out with your friends later today.”
- Make consequences immediate, short, and to the point.
- It’s important to link your teen’s action with the consequence. Inform them in the moment why they’re receiving the consequence.
- As parents, you have the choice of whether to allow the natural consequence or not (don’t allow unsafe natural consequences, such as forgetting coats in freezing temperatures).
- Avoid getting into “negotiations” with your teen. Negotiations are usually a way to delay unwanted activities. Parents are in control of the rewards/consequence systems.
- A logical consequence can be considered in times when natural consequence is unsafe/unreasonable.
- Consider the age, developmental level, and skill of your teen when deciding on an appropriate consequence.
- Caution: Avoid mixing rewards/consequence systems. Taking away an earned reward increases frustration and reduces motivation to try next time.
- Problem-solve/debrief with your teen afterwards.
- Help them think through their actions and visibly link the behavior with the consequence.
- Help them identify what they can do differently in the future.

Additional Resources:

- “Smart but Scattered: The revolutionary executive skills approach to helping teens reach their potential,” by Peg Dawson and Richard Guare.
- “Superparenting for ADD,” by Edward Hallowell and John Ratey.
- The website Teens and Adults with Attention Deficit/Hyperactivity Disorder (chadd.org).

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Working with the School to Support your Young Teen

Middle School

The middle school years present opportunities for growth and maturity for your young teen and set the stage for high school and beyond. Academic expectations increase significantly, and high school students are expected to tackle more challenging work and effectively manage their time while planning for life after graduation.

These responsibilities can be particularly challenging for teens with ADHD. Youth with ADHD benefit from getting help with organization and effective time management. It's important that parents and teachers show adolescents how to build these skills, then gradually provide less (or "fading") support over time, allowing them to rely on their own skill set and initiative. By having open conversations with your teen about their goals and responsibilities, you can grow their independence and encourage them to be active participants in crafting their own future.¹⁴



Picking up the Baton: Being a Self-Advocate

A key part of self-advocacy is learning to communicate your needs effectively. Educate yourself about ADHD and be aware of your strengths and challenges. These strategies may be useful:

- Feel empowered to ask for help when you need it. Nobody is perfect!
- Figure out whom you can talk to at school (and outside of school) to help you out.
- Brainstorm questions that you can ask a specific provider (like a guidance counselor).
- Role play with friends or parents about how you'll advocate for yourself.
- Set up meetings with school providers (like teachers, coaches and counselors).
- Learn about your 504 Plan or IEP (if applicable).
- Participate in your 504 Plan or IEP meetings. You could attend the entire meeting or join for part of it. Let your team know what's going well for you and what other supports you might need.

Accommodations

Federal laws exist to provide assistance and to protect the rights of children with disabilities. These laws include the Individuals with Disabilities Education Act (IDEA) and the Section 504 of the Rehabilitation Act of 1973. These laws are enacted in plans called 504 Plans and Individualized Education Programs (IEPs).

The details of what these plans offer each child vary between school districts. Whether a child with ADHD qualifies for 504 plan accommodations or an IEP depends on the degree of the child's needs. The goal of accommodations in the classroom should be to create an equal environment that encourages engagement and learning.

The type, frequency, and intensity of these supports can change throughout the lifespan. For adolescents, these accommodations can include, but are not limited to:



Strategic seating to minimize distractions

Seating them near the teacher, away from windows, and the doorway.



Clear directions

Ensuring that assignments are clear and that instructions are given verbally and visually (in diagrams or writing).



Verbal check-ins and reminders

Reviewing instructions with your child before they complete an assignment to make sure that they understand.



Note-taking

Some people with ADHD struggle to take effective notes, so they may benefit from support or specific instructions in note-taking strategies. They may also benefit from having note outlines, classroom notes, or access to class recordings, with the goal of independent note-taking.



Organization tools

Consider planners, color-coded folders, a dedicated homework/assignment book, or binder and other organizational tools. It's also helpful to use a planner/calendar to note important dates and deadlines posted on the school's website and in classes.



Reduce distractions

It may be helpful for teens with ADHD to take tests in a room with minimal distractions.



Structured study time

Children with ADHD often benefit from being assigned a structured study hall period, where they have access to organizational support for tracking and completing assignments.

Contact your school if you're interested in determining if your child is eligible for a 504 plan or IEP. Whether or not they get these formal supports, it's important for you to meet with your teen's school team to discuss the strategies to support their academic well-being.



Picking up the Baton: Supports at School

Here are some tips for helping you succeed in the classroom:

- Choose a seat near the front of the classroom and away from windows or doors to help reduce distractions.
- Make sure that you can hear the teacher's instructions. If you miss something, ask for help!
- Think about how you like to take notes – do you prefer to write (pen/pencil) or type on a computer/tablet? You might have access to classroom notes or recordings.
- Identify organizational tools that work for you, like color-coded folders, a homework/assignment book, or setting calendar reminders.
- Consider participating in structured study hall where you can get additional help tracking and completing assignments.

Homework and study tips

Designate a space with minimal distractions where your teen can do homework and study. By using this area for work consistently, they'll learn how to organize their space and their thoughts. The space should be comfortable and stocked with the supplies they need to finish their homework. An extra set of textbooks at home and a homework assignment book or planner may also help.



Tips

- Set a regular time to review schoolwork with your child every day. This may be done at home or at school with a parent or tutor.
- Break down large assignments into a series of steps. Then systematically complete each step.
- People often learn best by repeatedly reviewing information across time. For this reason, divide the material to be covered into small chunks and review them over several days instead of hours. This is far more effective than cramming!
- Schedule breaks into designated study time.
- Mnemonics, movement, writing, or audiobooks may help in reviewing and retaining school work. Be flexible and find which approach works best.
- When creating schedules for homework and studying, make sure to create time for rest and exercise. Your child should have at least 8 - 10 hours of sleep each night to help with growth and learning. Some children need even more sleep. We also recommend regular physical activity.

Additional Supports

Friendships

Peer relationships become the center of focus in adolescence. Having at least 1 close friend helps protect children with ADHD who may be at risk for social rejection.¹³ Parents and providers are encouraged to support any positive peer relationships that a teen has. However, with peer relationships due to impulsivity, hyperactivity and inattention. This puts them at risk for making poor peer choices or being rejected by peers.

Extracurricular activities

Encourage your teen to participate in activities that are fun and engaging so they feel successful and to increase self-esteem.¹⁵ These activities can help improve prosocial behaviors and can allow them to be creative.

Caregiver self-care

Raising children with ADHD can be challenging, as they rely upon your executive functions to help plan, organize, and manage their lives and behaviors. Taking time for yourself is essential. Giving yourself a break and pursuing your own interests and relationships will help you be an even better caregiver!

Therapy

Youth with ADHD may also have additional challenges, such as a co-existing diagnosis of anxiety or depression.

- Keeping a close relationship with their physician, therapist, and/or school can be helpful to manage challenges as they arise and provide expert support on your teen's development and needs.
- Individual and group therapy may be helpful to manage emotional and behavioral challenges. Cognitive behavioral therapy (CBT), along with dialectical behavior therapy (DBT), motivational interviewing (MI), and acceptance and commitment therapy (ACT) have demonstrated effectiveness for children and teens with ADHD and other emotional/behavioral challenges. People with ADHD often benefit from executive functioning skills training that focuses on improving planning, organization, time management, and other executive functioning skills.
- Collaborative problem-solving strategies for youth and their caregivers are also effective ways to manage conflict.¹²

Tools to help:

- Know who your teen is spending time with and encourage them to surround themselves with responsible, supportive people.
- Keep an open communication about their relationships.
- Give them opportunities to participate in structured social activities, like sports, clubs, and youth groups. If needed, trained professionals can provide real-time coaching in social skills to your child.

Healthy Habits: Sleep, Nutrition, and Exercise

Having a regular bedtime routine, eating a healthy diet, and exercising regularly are good for executive functioning, brain development, and overall health.

Sleep Insight

- Sleep plays an important role in adolescent development, behavior, and health.
- Recommended sleep time for adolescents (ages 13-18) is **8-10 hours a night**. Yet, many adolescents don't get enough sleep, and about 11% of teens have difficulty falling asleep.
- Children with ADHD are at increased risk of having a variety of sleep problems compared to typical peers. Use of stimulants to treat ADHD can also affect your teen's ability to fall asleep.
- Poor sleep can negatively affect mental abilities, which can lead to poor school performance and emotional/behavioral control difficulties.

Talk with your teen's doctor if they continue to have problems sleeping, particularly if you suspect it's related to their prescription stimulant. Other conditions, like periodic limb movement disorder, can be associated with ADHD and can affect your teen's sleep. Treating both conditions can improve their overall sleep quality – and their ability to focus and self-regulate.

Sleep hygiene

Sleep hygiene includes routines and behaviors that help promote good sleep.



- Have a set bedtime for your child. It's best to go to bed and wake up at the same time on school nights and on weekends. Encourage them not to sleep in on the weekends. Keeping a consistent bedtime will help them fall asleep each night and feel rested each day.
- Encourage your teen to use their bed only for sleeping or quiet activities before bed, like reading.
- It's recommended for people to stop using electronic devices (TVs, laptops, smartphones) for at least 1 hour before bedtime. Keep these devices out of the bedroom. Children can easily develop the bad habit of using social media after bedtime or "needing" the TV to fall asleep. The blue light from these devices affects the body's natural ability to wind down and fall asleep. It's also much harder to control your teen's media use if the devices are in the bedroom.
- Caffeine may disrupt your child's sleep. This includes caffeinated sodas, energy drinks, coffee, tea, and chocolate.
- Encourage physical activity and regular exercise, especially outdoor activities.



Picking up the Baton: Sleep

These tips will help you improve your sleep – an important step to feeling good during the day.

- Try to go to bed and wake up at about the same time every day (yes, even on weekends!).
- Try to only use your bed for sleep.
- Avoid using electronics an hour before going to bed. Keeping electronics out of your room is even better!
- Be smart about when you drink caffeinated beverages (coffee, soda, tea) because drinking caffeine at later in the day can affect your sleep.
- Being physically active and/or spending time outdoors will help you sleep well.

Appetite and ADHD Medications

- A common side effect of stimulant medications to treat ADHD is a decrease in appetite. Some children may also have some stomach pains. These side effects happen when the medication is active. For these reasons, your teen may not be as hungry when their medication is at its peak effectiveness, which is generally midday around lunchtime. Their appetite will probably return as the medication wears off in the afternoon/evening.
- We recommend having your teen eat a calorie-dense breakfast in the morning before they take their medication. Even if they may be less hungry or perhaps rushed to get out the door in the morning, they may enjoy something fast, like trail mix, a breakfast burrito, or smoothie with yogurt.
- If your teen isn't hungry at lunch, you can give nutritious, calorie-dense foods like nut butters, avocado, hard boiled eggs, dried fruit, or cheese. Eating even a small amount of these foods can give them healthy energy to move through their day.
- If your teen eats less at lunch but then gets hungry in the evening, consider giving an extra serving of dinner or a healthy evening snack.
- Most children and teens will continue to take in the same number of calories even if they're eaten at different times during the day. Your teen's doctor will monitor their growth and you can talk about it together at follow-up visits.

Elimination Diets

- While some children may have true allergies or sensitivities to foods and food dyes, most children (with or without ADHD) don't.
- Elimination diets are designed to address food intolerances and sensitivities and include gluten-free, casein-free, dye-free, and other restrictive dietary plans. Elimination diets are unlikely to improve ADHD symptoms in the majority of children. Clinical guidelines from the American

Academy of Pediatrics don't routinely advise elimination diets for ADHD treatment, because there's not clear evidence showing that they're effective.

- If the decision to try an elimination diet is being considered, your teen's doctor would collect detailed information about their symptoms. The diet should be supervised by your teen's health care provider and a dietitian.
- All children, with or without ADHD, benefit from a healthful diet focused on whole grains, fruits and vegetables, with few processed foods. Lowering the amount of food additives, like food colorings and preservatives, is a good idea for all children because of health concerns about these products.

Dietary Supplements

- Omega-3 fatty acid or fish oil pills are commonly used supplements in the United States that may reduce inflammation and improve health outcomes for certain conditions. While they seem to be helpful for overall health and wellness, there's currently no clear evidence that shows *clinical benefits* from omega-3 supplements in improving outcomes for children and adolescents with ADHD. So, we don't generally recommend omega-3 or essential fatty acid supplements to treat ADHD.
- There's no evidence that megavitamins are beneficial in treating core symptoms of ADHD, and these can actually increase risk for serious adverse side effects.

Exercise

There's emerging research suggesting that sustained aerobic exercise (20 minutes or more each day) helps manage ADHD symptoms in teens. Finding ways to increase opportunities for your teen to be active can help with inattention and hyperactivity.

General Nutrition Tips

Family mealtime can be a great way for parents to model healthy cooking and eating habits, and provides a great opportunity for family bonding.

Everyone benefits from a healthy diet with enough fruits, vegetables, whole grains, lean proteins and healthy fats.

Make sure they drink mostly water.

Avoid food and drinks that are highly processed, high in sugar or have caffeine.

Encourage them to eat 3 meals a day, with 1-2 small snacks between meal times as needed. Limit constant snacking or "grazing" since they won't be as hungry at mealtimes.



Picking up the Baton: Healthy Habits

Adopting a healthy lifestyle can positively affect your mood, energy, and attention.

- **Follow natural rhythms:** Most of us have set times in the day or night when we function best and are most productive. Find out when your peak energy and low points are. Try to schedule your work and rest around those times.
- **Nutrition:** Stay fueled and hydrated with water and wholesome snacks. Stimulant medication can reduce your appetite during the day so try to make up for it with filling breakfasts and dinners.
- **Exercise:** Research suggests that regular exercise can help with attention. When you're struggling to complete a task, consider taking a movement break. Going for a walk, riding your bike, or playing a game of basketball might help you to regain focus and motivation.

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Social Media Safety

Coming of Age in a Snapchat World: How Do I Keep My Teen Safe?

Previously featured in the Thriving blog post "Coming of Age in a Snapchat World? How Do I Keep My Child Safe?"

Authors: Marie Reilly (MD) and Amy Young (PsyD)

Date: January 2018

Social media has become a part of our everyday lives and is changing the way we interact with the world around us. Teenagers use an average of 9 hours of entertainment media every day and tweens (ages 8-12) use an average of 6 hours a day, not including using media for school or homework.* What is the long-term impact of this amount of media exposure on the developing brain? We don't yet know. What we do know is that it is impossible to prevent your child from using social media. So how can you help them use social media safely?

**According to a study by Common Sense Media*

As your child gets older, you should expect:

- They'll want to establish a sense of autonomy and individual identity, including seeking independence from their parents and looking for approval from their peers.
- They'll want more privacy and personal space, both online and offline.
- The tween and teenage brains aren't fully developed, particularly the prefrontal cortex. This area of the brain controls executive functioning. Executive functions include the ability to control impulsive responses, think through consequences of behavior and regulate emotions. Executive functioning skills continue to develop until a person enters their mid-20s. People with ADHD are likely to have trouble with executive functioning.

When it comes to social media, tweens and teens with ADHD are more likely to:

- Act impulsively and take risk
- Experience low self-esteem
- Seek approval or acceptance from peers
- Seek attention
- Misread social cues

Social media pitfalls

- **Digital etiquette:** There are many unspoken rules related to cellphone and social media use. The timing, frequency and content of texts, tweets and posts can all impact the way that someone perceives that information.
- **Privacy:** Content posted on social media can be easily shared, regardless of privacy settings, through reposts, retweets and screenshots. Poor decisions and social mishaps are common among adolescents as they develop their identities and learn to navigate relationships. The lack of privacy online creates greater opportunities for highly visible mistakes.
- **Digital footprint:** Information, pictures, and opinions shared on social media make up a lasting "digital footprint" that can affect your child's reputation with peers, future colleges and potential employers.
- **Safety:** Social media poses safety concerns, including the possibility of cyberbullying, identity theft, stalking, exposure to sexual predators, access to inappropriate content and sending/receiving sexualized content ("sexting").

Do's and Don'ts

Do

- ✓ **Familiarize yourself with your child's social media use and learn to use their social media platforms.** Ask your child to teach you about the apps they use. This gives them the opportunity to share their knowledge, and provides you the opportunity to discuss potential benefits and risks to use.
- ✓ **Talk with your child.** Talk about the permanence and public nature of posts. Review what they should do if they feel threatened or victimized. Cyberbullying rates range from 20-40%.¹ These rates may be underestimates because of people's reluctance to tell others they are being bullied.
- **Respect your child's right to privacy.** This includes monitoring what you share about your children on your own social media accounts. Although you may think the picture of your child in an embarrassing situation is endearing, they may feel uncomfortable or ashamed.
- ✓ **Set boundaries.** Establish clear rules around media use as a family. For example, review the times of day and frequency that you can all text a friend or post online. Create rules around when devices should be turned off before bed. The American Academy of Pediatrics recommends that families design a Family Media Plan to address these areas.
- ✓ **Encourage Digital Detox.** Plan media-free times as a family – read books, take classes, or explore a new park. These experiences will encourage creativity and growth and will also help with stress. Early research suggests that the more social networks a young adult uses, the more likely they are to report symptoms of anxiety and depression. For some, social media can become an addiction, with brain imaging showing that Facebook (and other social media) activates the same "impulsive" pathways associated with cocaine use.

Don't

- ✗ **Don't eliminate all social media.** Today, social media is integral to a tween or teen's life. Relationships that occur in person also extend to and live on social media platforms. So, eliminating access to social media is both unrealistic and too harsh.
- ✗ **Don't install parental monitoring type applications.** This hasn't been shown to be effective. It can also create an environment of distrust between you and your child.
- ✗ **Don't assume.** Don't assume your child will never engage in risky behavior. Small lapses in judgment, like sending a provocative photo, joining in cyberbullying, or posting a rude comment can have serious consequences.



Picking up the Baton: Internet Safety

Now that you have greater freedoms, it's important that you consider the following precautions in order to keep you safe:

- Try to remain anonymous when you're online. Be very cautious about who you send your private information to, including: full name, photographs, social security number, passwords, family member's names, credit card information, your current location and addresses.
- Always check with a trusted adult when you are unsure!
- Remember that anything sent electronically can be saved – and distributed. This can include pictures, texts, emails, videos, etc. If you wouldn't want this information public, then re-consider whether it's worth sending.
- Be cautious about meeting up with virtual friends in real life. It's easy for a person to pretend to be anyone, so check with a parent before planning to talk/meet with someone.
- Check your mood before purchasing anything. Sometimes it's better to wait before impulse buying something you really don't want.

Additional Resources

- American Academy of Pediatrics: www.healthychildren.org (search Family Media Plan)
- Center on Media and Child Health: www.cmch.tv
- Common Sense Media: www.commonsensemedia.org

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Making Technology a Tool, not a Time Sink

Although the media often focuses on the impacts of screen time on children with ADHD, there are ways to leverage media and technology to help children with ADHD stay organized and avoid distractions.

Popular strategies include:



Interventions Q&A

Highlights from this section were featured in the Discoveries – Stories and News from Boston Children’s blog post, “Common questions about ADHD Treatment”:
<http://discoveries.childrenshospital.org/adhd-treatment>

Evidence-based interventions are treatments that have been studied using standardized procedures and have shown to be effective. If an ADHD treatment has demonstrated positive results in multiple, well-done research studies, then it’s reasonable to consider it as a treatment (or what we call an “intervention”) for your teen.

When considering an intervention, we recommend that you ask your teen’s clinician if there are research studies to support it. Here at Boston Children’s, we only recommend a treatment if there’s an established, published track record of the treatment. Please feel free to call your provider at Boston Children’s for guidance if you have questions about an intervention you’ve heard about. If a treatment hasn’t been rigorously studied, it has the potential to be harmful, ineffective or be a waste of your time and money.

Below, we answer some common questions that parents ask about ADHD treatments for their children.



An occupational therapist at my teen’s school recommended a weighted blanket and sitting on a yoga ball during class.



Occupational therapy has known benefits, like improving fine and gross motor strength and coordination, but it hasn’t been proven to be clinically beneficial for treating ADHD. Occupational and physical therapy could certainly be helpful if your teen has motor weakness or coordination issues (usually motor apraxia or developmental coordination disorder), but not for the core symptoms of ADHD.

Some occupational therapists have suggested that “sensory processing disorder” may underlie or overlap with the various symptoms of ADHD and other neurodevelopmental disorders like Autism Spectrum Disorder.¹ This claim has not been supported by the research literature. Right now, none of the established medical or psychological professional societies recognize sensory processing disorder as a diagnosis.² So we don’t recommend sensory-modulating occupational therapy devices as a treatment for ADHD.

Q Are fidget spinners recommended?

A There are no scientific studies proving that fidget spinners provide benefits to children with ADHD. There's actually some evidence that fidget spinners might worsen a teen's attention in the classroom. Serious safety concerns have also come up because children can accidentally swallow parts of these products.

For recommendations on how to help support your teen in the classroom, please see the school section of this booklet. It has information on accommodations (special plans) you may want to consider adding to your teen's 504 Accommodation Plan or Individualized Education Plan (IEP).

Q Is it true that there is a genetics blood test that my teen can take that will determine best ADHD medication for them to take?

A Our genes play a role in how we metabolize medications. For example, one person might react poorly to one medication but have no side effects on a different medication. The field of pharmacogenomics is based on the idea that by studying certain genes that are involved in how medications are processed by the body, or metabolized, clinicians can predict which drugs may work better and produce less side effects for a person.

Significant advances have been made in this area. But genetic testing to determine which ADHD medication should be prescribed to children is not yet a routine recommendation, and additional research is needed.³ There are genetic tests that aim to help guide ADHD medication selection for people based on their genetics. However, studies analyzing the accuracy, precision and effectiveness of these tests are still needed. So, we don't currently recommend these tests. In other words, we are not yet able to "pre-select" medications for ADHD based on genetic testing.

It's common for children to try more than 1 ADHD medication before finding the kind that works best for them. All children metabolize medications differently, so many children start medications at a low dose and slowly take a higher dose while a clinician is carefully monitoring their response.

Sometimes, it's useful to have a consultation with a pharmacogenomics specialist like if a teen has tried several medications with little benefit. It can also help if they had an unusual amount of side effects. In these cases, we recommend discussing the possibility of a pharmacogenomics consultation. If genetic testing may be a good idea, it's best for testing to be sent by clinicians with expertise in the field in order to meaningfully interpret the results and use them to make medication decisions.



Is it a good idea to use a trigeminal nerve stimulator device as a treatment for ADHD?



Trigeminal nerve stimulation (TNS) is a non-invasive, “neuromodulation” device that provides electric stimulation to the trigeminal nerve while your teen sleeps. The thought behind this device is that stimulation of the trigeminal nerve will send signals to parts of the brain thought to be involved in ADHD. There are currently only 2 studies supporting the effectiveness and safety of this device as a treatment for ADHD.⁴ Many more studies are needed before it can be routinely recommended as a treatment.

Neurofeedback and other “brain-training” interventions like CogMed have captured parents’ interest, too. The data supporting them as a treatment for ADHD are quite limited. Children may become skilled at the “brain training” tasks and games, but it’s unclear whether improved skill at these games translates into better real-world outcomes like academic performance or better organization skills.⁵

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ADHD in Middle Schoolers

Family Education Guide