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Confronting Adult ADHD

How to manage a lifetime of attention issues

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4 Blackfan Circle, 4th Floor
Boston, MA 02115
www.health.harvard.edu

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Medical Editor

Martin H. Teicher, MD, PhD
Associate Professor of Psychiatry,
Harvard Medical School
Director, Developmental Biopsychiatry
Research Program, McLean Hospital

Editor

Lisa Ellis

Writer

Jay Roland

Creative Director

Judi Crouse

Art Director

Mary McGavic

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David Roberts, MD
Dean for External Education

Urmila R. Parlikar
Director, Editorial Operations

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Could you have ADHD?

When faced with a deadline, do you get to work immediately with a well-crafted plan to get everything done in time? Or do you struggle to get started? Get distracted with other tasks along the way? Find yourself growing frustrated with your own lack of progress?

Or maybe your work gets done on time, but shows the marks of some carelessness and inattention to detail. Perhaps you tend to misplace things or tune out conversations that really demand your focus.

These behaviors, if they are lifelong problems, are classic signs of adult attention deficit hyperactivity disorder (ADHD).

And while ADHD is a condition most often associated with children—picture the student who squirms in his seat and can't seem to pay attention to his teacher—it is also a challenge faced by more than 4% of adults in the United States, according to the CDC. And for children who have ADHD,

chances are they will have it the rest of their lives. While it had been thought that more than one-third of children with ADHD would outgrow it, a 2021 study published in the *American Journal of Psychiatry* suggests that only about 10% completely outgrow the disorder.

Many people with ADHD are not diagnosed until adulthood. For example, boys tend to be diagnosed at a much higher rate than girls. ADHD is often missed in girls if they are less overtly fidgety and disruptive in class. But a 2021 article published in the *Journal of Attention Disorders* found that the gender gap has closed significantly, in large part because of increased awareness of adult ADHD symptoms and a growing emphasis on adult diagnosis in recent years.

Some adults only suspect that they have ADHD when it's diagnosed in one of their children. (See “Do you have ADHD? Questions to ask yourself,” page 14.)

Overcoming the stigma

Despite the greater attention ADHD has received in recent years, it remains a widely misunderstood condition. Adults may feel that their symptoms don't rise to the level of a diagnosable problem. Or they might not seek a diagnosis because they don't want to be labeled as having a condition like ADHD, one that's still too often associated with hyperactive children.

For adults with ADHD, a stigma remains, though it's fading slowly. The following false beliefs contribute to this stigma:

- that ADHD is only a childhood problem
- that it's not an actual medical condition, but instead an excuse for procrastinating or being lazy
- that it's a sign you're somehow not normal, even beyond just the differences in brain function associated with ADHD
- that ADHD medications are addictive or gateways to more powerful drugs and cause unwanted side effects related to mood and brain health.

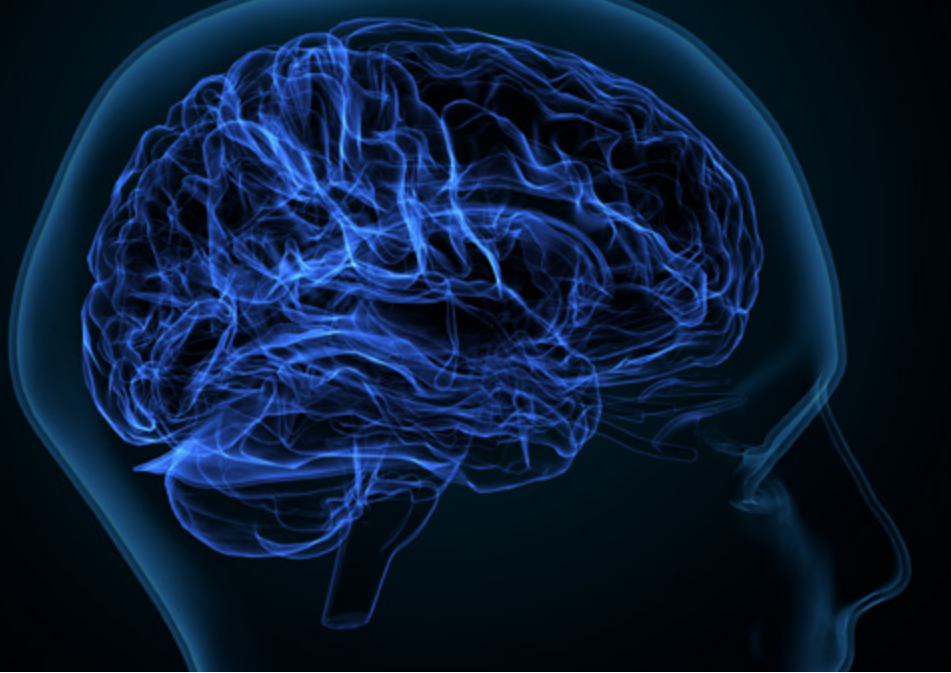
The nature of ADHD symptoms—that they come and go depending on the situation—also contributes to misunderstandings and stigma surrounding the condition. A person with ADHD, for example, may be able to read for hours and absorb what is being read if the material is particularly enjoyable, but then seem to stop paying attention two minutes into a dinner conversation. This can cause those around you to question the legitimacy of your diagnosis and ADHD itself.

ADHD is a brain disorder characterized by a continuing pattern of problems with paying attention, a tendency to be easily distracted, restlessness, and impulsive behavior. In adults, ADHD can interfere with job performance, relationships, and many aspects of everyday life.

Hyperactivity is common, though not universal, among children with ADHD. It may seem like less of a problem in adulthood, as adults with ADHD often have greater freedom to get up and move throughout the day than students in a classroom. However, researchers using objective measures of motion have found that difficulty sitting still persists in adults to the same degree as other ADHD symptoms. (See “Are ADD and ADHD the same thing?” on page 5.)

In short, these symptoms related to attention, organization, motor control, and follow-through can last a lifetime. Fortunately, they can often be managed effectively with a combination of medications and behavioral strategies. Although ADHD has no cure, there are ways to overcome its challenges at any age.

In this guide, you'll learn more about ADHD and the brain, some expected and unexpected symptoms of the disorder, and how it's diagnosed and treated. We'll also describe some strategies and tools you can use if you are one of the millions of adults with ADHD.



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ADHD and your brain

Though much has been learned about the science of ADHD, many people in the general public and even in the education field view ADHD as a learning disability or difference, rather than a medical condition. An article published in *BMC Psychiatry* in 2022 urges educators—in higher education in particular—to move away from that thinking and recognize that people with ADHD have a health issue requiring treatment and support.

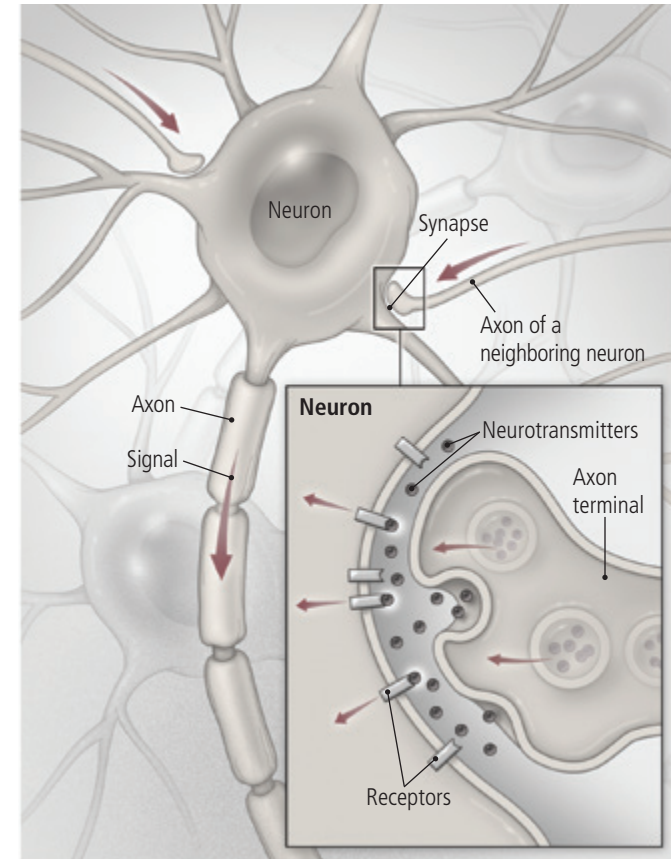
ADHD is considered a neurodevelopmental disorder, which refers to an abnormality in brain function that emerges during childhood and affects learning, emotions, and behavior. More severe neurodevelopmental disorders include autism spectrum disorder and intellectual disability.

Compared with someone who does not have ADHD, an individual with ADHD has differences in brain structure and activity involving neurotransmitters, the chemical messengers that carry signals from a nerve cell (neuron) to a target cell, often another neuron.

The role of neurotransmitters

While carrying chemical messages between neurons, neurotransmitters cross a gap called a synapse, from an axon terminal at the end of one neuron to a receptor on another. (See Figure 1.) Once the signal is passed, the neurotransmitters temporarily become inactive, primarily by being transferred back into

Figure 1: A wide web of connections



A vast network of interconnecting neurons (nerve cells) delivers messages along neural pathways, primarily in the cerebral cortex, the large, convoluted, domed outer layer of the brain. Neurons communicate from one to another across microscopic spaces called synapses, by way of chemical substances known as neurotransmitters. These neurotransmitters activate the receptors on the neighboring cell and cause it to transmit signals to the next cell, and so on.

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the terminals that released them. This process, called reuptake, takes place through proteins known as transporters that are located on the axon terminal.

ADHD symptoms are influenced by the activity of two of the brain's primary neurotransmitters: dopamine and norepinephrine. People with ADHD don't necessarily have lower-than-normal levels of dopamine or norepinephrine. But there is evidence that they have an increased number of dopamine transporters that deactivate dopamine once a signal is sent.

Dopamine affects attention, mood, movement, and motivation. So if there are more dopamine transporters at work, removing dopamine too quickly from the brain of someone with ADHD, there may not be enough dopamine available for this important neurotransmitter to exert its full effect.

ADHD and the prefrontal cortex

Many of the symptoms of ADHD are believed to arise from dysfunction of the brain's prefrontal cortex (PFC). Through an extensive network of connections with other brain regions, the PFC helps regulate functions such as attention, self-control, organization, and time management, among others. In particular, the PFC allows people to deliberately focus their attention and to shift attention from one thing to another on purpose. It also regulates the ability to avoid impulsive behaviors and movements.

Another function of the PFC is working memory. This is the mental sketchpad that enables us to keep in mind an event that just occurred or to bring to mind information extracted from long-term storage. We rely on working memory when we go into a room to retrieve something. We also notice how vulnerable this process can be when we realize we just forgot what it was we had intended to do there.

Dopamine and norepinephrine work together in the functioning of the PFC. These neurotransmitters regulate the strength of the signals between neurons. They don't convey detailed information, like the audio and video components of a TV show, but function more like the volume controls. Dopamine and norepinephrine need to be at optimal levels for proper functioning of the PFC. Either too much or too little is detrimental and interferes with our ability to sustain attention, focus on a task, shift attention when required, hold information in working memory, and avoid acting on impulse.

Norepinephrine, acting on other brain regions, also plays a critical role in our level of arousal. The norepinephrine system is relatively inactive when we sleep, low when we're fatigued, moderately active during most ordinary waking hours, and highly activated when we're under stress or engaged in fight-or-flight

reactions to threats. Our ability to sit quietly and read a book for an extended period, for example, relies on a moderate level of norepinephrine.

Dopamine, meanwhile, is involved in regulating motivation and reward. People with ADHD often find that they have no difficulty paying attention to things that they find interesting or enjoyable, which can stimulate the dopamine system. On the other hand, they may experience much more difficulty than someone without ADHD in focusing on things that they find boring or don't understand. Stimulant medications, which increase both dopamine and norepinephrine, can markedly enhance your capacity to sustain attention to monotonous tasks. However, if misused, drugs that enhance dopamine have the potential to become addictive.

Other brain differences

Differences in neurotransmitter levels and behavior are only some of the ways the brain of someone with ADHD is unlike that of a person without the

Are ADD and ADHD the same thing?

The terms ADD and ADHD are still often used interchangeably, even though ADHD has been the preferred and correct terminology for this disorder for some time. The reason for the confusion goes back to 1980, when the American Psychiatric Association published the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the condition was called Attention Deficit Disorder (ADD) with hyperactivity (ADD/H) or without hyperactivity (ADD/WO).

ADD became shorthand for anyone with either type of disorder, even though the name was changed to attention deficit hyperactivity disorder (ADHD) in the 1987 edition. The most recent edition, DSM-5, published in 2013, breaks ADHD down into three types: attention deficit hyperactivity disorder with predominantly inattentive presentation, with predominantly hyperactive/impulsive presentation, or with combined presentation.

Adding to the confusion is the fact that hyperactivity remains the most discernible sign associated with ADHD. So when someone doesn't appear to be hyperactive or impulsive, teachers, family members, and others may say, "You can't have ADHD—you're not hyper or fidgety." But many children and adults with ADHD are not hyperactive. The skepticism of others can lead people who have deficits only in attention and organization to question whether they actually have ADHD.

As the distinct types of ADHD have become better understood by the public, there is less hesitation to acknowledge ADHD in people who are not hyperactive.

condition. On average, a person with ADHD may have a very slight reduction in total brain volume, particularly in gray matter, the portions of the brain where the neurons and their interconnections reside. More specifically, differences in volume can be seen in regions of the brain that deal with attention, thinking, memory retrieval, reward, and processing of input from the senses, among others.

Functional differences also can occur. For example, brain scans on people performing tasks known to stimulate these regions show less activation of the regions in people with ADHD.

In contrast, other regions of the brain may be more active in ADHD. For example, during tasks that involve processing and remembering new information, increased activity has been observed in regions involved in daydreaming, mind-wandering, and thoughts about self and others. Normally, these regions should be less activated when performing such tasks. If you have ADHD, this may help explain why your thoughts often drift to other subjects during meetings or when working on a deadline.

However, the brain differences between individuals with ADHD and those without the disorder are typically small, and there are overlaps between the two groups. As a result, these differences alone cannot be used to reliably diagnose the disorder.

The scientific consensus also does not support the idea of ADHD as a single disease with a specific cause and one underlying abnormality. Rather, it is a syndrome consisting of numerous related diseases with distinct causes and underlying differences in the nervous system.

Although we do not know the exact cause, it's important to remember that ADHD is a brain disorder and not a sign of laziness or apathy. Many people think someone with ADHD just needs to try harder. Urging someone with ADHD symptoms to "Pay attention!" isn't helpful and may in fact reinforce the myth that this disorder is something well within a person's control. (See "Myths and misunderstandings," page 11.)

It's possible to manage ADHD symptoms, but first it's important to recognize them and pursue a diagnosis and treatment if necessary.

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Symptoms

ADHD symptoms usually can be slotted into one of three categories:

- inattention
- hyperactivity and impulsivity
- a combination of these symptoms.

The hyperactivity component is often more noticeable in children, though restlessness and impulsive behavior can certainly be present in adults. For example, you may find yourself squirming in your seat if you've been sitting for a long time. Your hands may fidget with things on your desk or in your pocket.

However, difficulty with attention and focus are usually the primary challenges for adults. These issues may cause you to be easily distracted and appear uninterested in those around you. These symptoms can and often do interfere with the ability to finish projects at work and keep track of important information, appointments, and other responsibilities.

In addition, ADHD-caused inattention can lead to other problems, including accidents behind the wheel, in the kitchen, on the job, and elsewhere. These problems with attention are often compounded by problems

with impulse control, which may lead adults to interrupt when they should be listening or to switch lanes without looking when driving.

But there is much more to ADHD than losing your focus or getting fidgety. Research also suggests that men with ADHD are most likely to show hyperactive-impulsive symptoms and externalizing symptoms such as verbal or physical aggression. Women with ADHD tend to show inattention and signs of internalizing problems, such as social withdrawal and depressive symptoms. It also appears that women with ADHD face higher risks of relationship problems and self-harm.

The following are also common ADHD symptoms.

Forgetfulness. Occasionally forgetting appointments and other obligations in our busy lives is common. But for people with ADHD, forgetting things is a consistent problem that can affect work, health, family, friendships, and more. Tests show that individuals with ADHD tend to perform

worse on tests of working memory and in the free recall of new information. On the other hand, they are not impaired in their ability to recall if provided with cues, or if the information is stored in their long-term memory.

Being easily distracted. If you have ADHD, you may have trouble concentrating because you can't seem to ignore what's going on around you. Contrary to conventional wisdom about ADHD, some psychologists say that the problem isn't always a case of not paying enough attention to something, but instead trying to

pay attention to everything. A phone call, text, email, or unimportant noise or activity nearby can steal your attention easily. This can be a major problem for people who work in busy or noisy places.

Disorganization. While anyone can have a messy desk or a cluttered home, a poorly organized workspace and living space are hallmarks of someone with ADHD. Being disorganized can also be revealed in written reports that don't follow a logical order and in other tasks in which organization and structure should be priorities.

Restlessness. In children, restlessness usually manifests as hyperactivity, whereas in adults with ADHD, it's reflected in being impatient and having difficulty relaxing. Often that restlessness comes across to others as being edgy or tense. You may have difficulty sitting through a long meal or a meeting without getting up and walking around. Restlessness may also drive a person to move from job to job.

Impulsiveness. Adults with ADHD may exhibit a range of impulsive behavior, from interrupting others during a conversation to gambling or excessive alcohol use.

Feeling overwhelmed. The idea of starting a project, or even a small task that requires some planning, can seem overwhelming to people with ADHD. Organizational struggles can affect household finances, work, and especially something more complicated, like planning a trip. You may spend too much time on something minor, leaving less time for a more important job. Or you may not know what to start on first when faced with more than one task.

Trouble coping with stress. Research suggests that stress and ADHD symptoms may reinforce each other. In other words, the daily difficulties that stem from ADHD may raise stress levels, and stressful situations you encounter may worsen ADHD symptoms. In any event, stress management is often an especially challenging task for anyone with ADHD.

Inconsistency in honoring commitments. This can be particularly harmful in relationships, whether it's a commitment to a spouse, child, or friend. If you find yourself forgetting appointments or events because you got

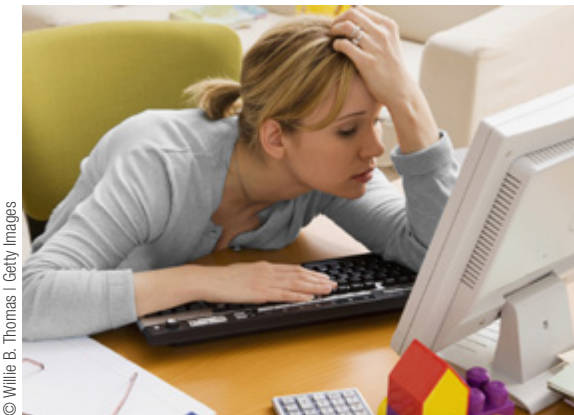


Any project that requires planning and organization may feel overwhelming to someone with ADHD.



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Forgetfulness can seriously hamper work, health, and relationships for people with ADHD.



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People with ADHD may have more problems than others in coping with stress.



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Because they are highly susceptible to distractions, people with ADHD may frequently forget appointments or fail to honor other commitments.

ready for work or a date. Tardiness is a very common trait of people who have ADHD. Because decision-making is more difficult, simply getting started on a task can use up valuable time. And it's quite common for people with

distracted, it's important to look at why you're missing out on those commitments. Did you work late and forget about a dinner date? Did you make a doctor's appointment and show up at the wrong time? These scenarios can happen to anyone once in a while, but if they are frequent occurrences, they may be a result of ADHD.

Poor time management.

Being easily distracted can mean taking longer to get

ADHD to underestimate the time necessary to complete an assignment or finish a task, meaning work is often done past its deadline.

Mood swings. If you have ADHD, you may be laid back and easygoing most of the time. But the condition often means getting upset quickly over minor things. It's a result of feeling as though you don't have as much control in your life as you'd like. Angry or impatient episodes tend to resolve quickly, though for the people witnessing them, it can take longer to get over these outbursts. Likewise, an individual with ADHD can sometimes experience episodes of sadness, guilt, self-doubt, and hopelessness related to work that doesn't get done or handling a situation in a way that leaves others disappointed or hurt.

Risky driving. Texting while driving, driving too fast, getting distracted while driving, and getting frustrated behind the wheel can lead to accidents or losing one's driver's license.

Hyperfocus. One interesting aspect of ADHD is that although you usually have trouble concentrating, you may be able to focus intently on things that interest or please you. Other thoughts and concerns disappear while you engage in the activity at the center of your hyperfocus. This ability can be confusing. Both the person with ADHD and the people around him or her may wonder how someone capable of such intense focus can have ADHD.



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Someone with ADHD may become upset or angry easily or feel guilty about falling short of expectations.

ADHD and sleep problems

While sleep might seem like it should be the one part of your life not bothered by ADHD symptoms, for many people the opposite is true. ADHD's restlessness, both physical and mental, can interfere with natural sleep patterns. As a result, people with ADHD often struggle to fall asleep, stay asleep, wake up, or some combination of the three.

But unlike many ADHD symptoms, sleep troubles tend to appear later in life, often starting in the teen years. Recent research suggests that 10% to 15% of adolescents with ADHD have problems falling asleep, which is about twice the average for their peers without ADHD.

To help ease sleep-related problems, try to practice good "sleep hygiene." Make sure your bedroom is dark, cool, and conducive to a good night's sleep. Stick to the same bedtime and wake-up time every day as much as possible. Avoid naps during the day, screen time late at night (and never in bed), and caffeine late in the day. And if you take medication for ADHD, talk with your doctor about adjusting the time of day you take it, as medication side effects may play a role in how easily you can fall and remain asleep.

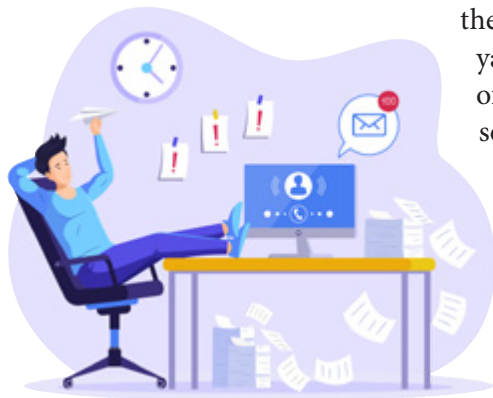


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Risky driving can occur when people with ADHD get frustrated, distracted, or make poor decisions behind the wheel.

Hyperfocus certainly has some benefits, as it can help you see new patterns or perfect a particular skill. In one famous example, future Olympic champion Michael Phelps was diagnosed with ADHD as a child. As part of his treatment, he was enrolled in a swimming program. His ability to focus intensely allowed him to spend countless hours in the pool, enthusiastically training and racing and ultimately winning 28 Olympic medals.

But hyperfocus can also lead to hours spent playing video games or other less fruitful activities, while work and other responsibilities go unfinished.



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People with ADHD may procrastinate starting, continuing, or completing projects.

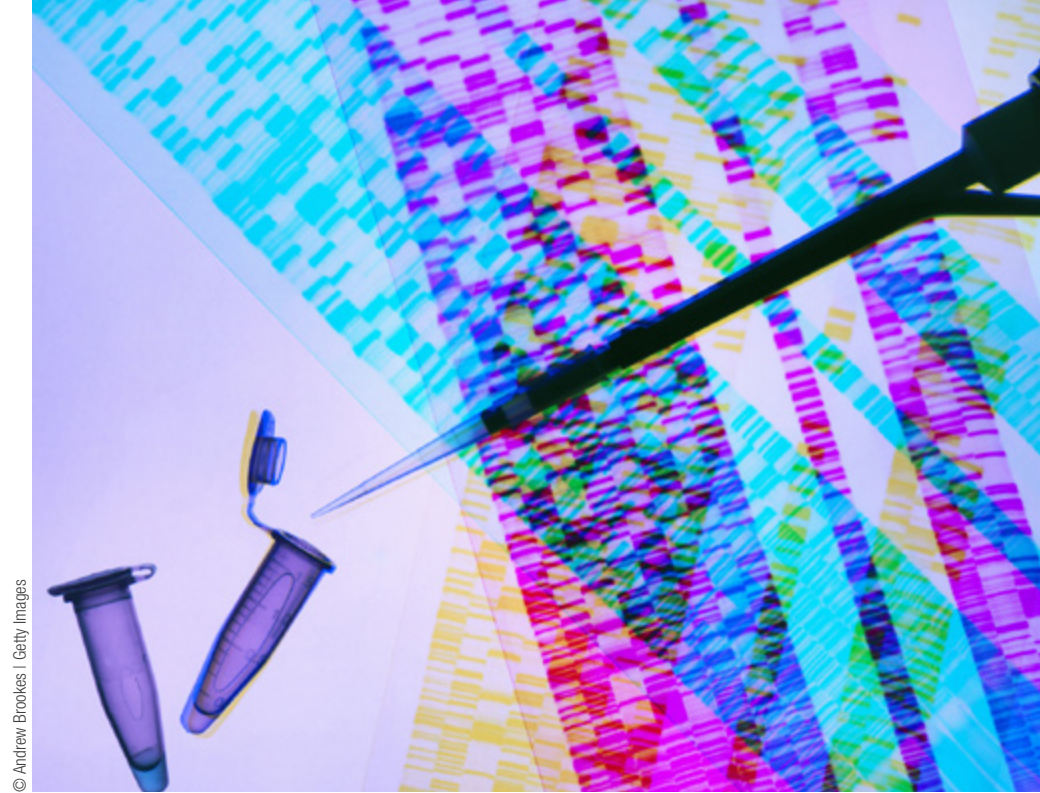
Procrastination. While many people tend to put off tasks they don't want to do, such as taxes or yard work, individuals with ADHD often delay starting any project, even something they might enjoy. There may be three factors at work: distraction, poor sense of time, and feeling overwhelmed. Everyone finds it hard to get enthusiastic if a project isn't especially interesting. But for people with ADHD, there are often few tasks that can truly hold their interest.

Failure to complete projects. Once a project or assignment has begun, the person with ADHD may have trouble

seeing it through to completion. This can include everything from not finishing a book to leaving household tasks or work-related projects unfinished.

Hoarding. A 2022 study published in the *Journal of Psychiatric Research* suggests that people with ADHD are significantly more likely to exhibit hoarding behaviors compared with those who don't have ADHD. In many cases, the hoarding behavior has a serious impact on their quality of life.

Having one or more of these challenges doesn't necessarily mean you have ADHD. However, if you have been struggling with some of these symptoms for most of your life, consider discussing them with your doctor, who can refer you to a mental health professional for a formal ADHD evaluation. (See "Diagnosis," page 11.)



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Causes and risk factors

ADHD may have many causes. Researchers have identified several potential triggers for the condition, so it's unlikely that there is a single origin of this common disorder. But it's clear that ADHD often runs in families. Studies of families and twins show that about 70% to 80% of the variation in symptoms can be attributed to genetic factors rather than the environment or a person's experiences. Researchers are attempting to identify the specific genetic differences that may be involved.

An article published in 2018 in *Nature Genetics* found gene variants linked with ADHD in 12 locations in the genome. The study included more than 20,000 people with ADHD and 35,000 who did not have the condition. The National Human Genome Research Institute, which is part of the National

Institutes of Health, is currently working on an even larger study to identify specific genetic factors that may contribute to ADHD.

However, a comprehensive analysis published in the *Journal of Child Psychology and Psychiatry* in 2021 indicates that the genetics of ADHD are quite complex. The analysis found that genome-wide association studies—which scan complete sets of DNA to find genetic differences linked with particular diseases—at present can explain no more than about 3% of the variability in ADHD symptoms. As a result, these studies offer no current benefit for prevention, diagnosis, or treatment of ADHD.

Some studies have suggested that babies born prematurely are at a higher risk of developing ADHD. A 2021 article published in the *Journal of Attention*



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Research suggests that ADHD is much more common among babies who were born prematurely.

A mother's exposure to environmental toxins, such as pesticides and other lawn products, household cleaners, and chemicals in flooring, carpeting, and elsewhere in the environment may affect brain development (and ADHD risk) of unborn children. For example, a 2021 study published in the journal *Environment International* found that prenatal exposure to certain organophosphate esters (OPEs), which are commonly used flame retardants, may raise the risk of ADHD.

Nonchemical hazards may also play a role. Research published in 2020 in *JAMA Network Open* suggests that mothers exposed to magnetic field non-ionizing radiation, such as that emitted by power lines, are more likely to have children diagnosed with ADHD.

Disorders suggests that children born prematurely are more likely to be diagnosed with ADHD than those who are full-term. For example, children born at 28 weeks or younger had four times the risk of having ADHD compared with children born at 35 to 36 weeks or later.

A 2020 article published in the *Journal of Attention Disorders* suggested there was a higher risk of ADHD in children born to mothers who smoked during pregnancy.

Head injuries and ADHD risk

A blow to the head can cause both temporary and permanent changes to brain function. A traumatic brain injury (TBI) is a head injury that causes at least a temporary change in brain function. This could be confusion, memory lapses, a loss of consciousness, or another similar result.

A TBI may also make it more likely you will develop ADHD, though the effects may not be obvious for several years after an injury. A small study published in *JAMA Pediatrics* in 2018 found that children who had suffered mild or moderate TBI were about twice as likely to develop ADHD later in life, while those who suffered severe TBI were about four times as likely to develop ADHD.

While ADHD is less harmful to quality of life than some other effects of a brain injury, it's important to understand the role a childhood sports concussion or other injury could play later on. If you are thinking about possible causes of ADHD in your own life, consider whether a blow to the head—even one that didn't seem particularly serious at the time—might have triggered attention problems in the months or years after the injury.

Once a child is born, exposure to pesticides, air pollutants, and other environmental toxins may increase the risk of ADHD and learning disabilities, according to a 2018 study in *Environmental Research*.

Some recent studies also suggest another possible cause of ADHD: abuse or neglect in childhood. A 2018 British study of more than 2,200 twins, published in the journal *Child Abuse & Neglect*, revealed a strong link between living in a home with physical, emotional, or sexual abuse and having ADHD in childhood and early adulthood. Other studies have also shown links between adult ADHD and exposure to early childhood neglect.

Further, children with ADHD are at increased risk for physical and emotional abuse by parents and peers, as well as sexual victimization. Exposure to such maltreatment worsens ADHD outcomes. Youth with ADHD plus maltreatment showed greater intensity of hyperactivity, impulsivity, aggression, and behavioral disorders, as well as mood and anxiety symptoms, than ADHD youths without maltreatment. Children victimized by peers are more likely than others to have problems with inattention, learning disorders, executive functioning, and relationships. A 2019 study that followed a group of children for two years reported that each year of exposure to physical or emotional abuse increased the odds of having persistent ADHD by 40%.

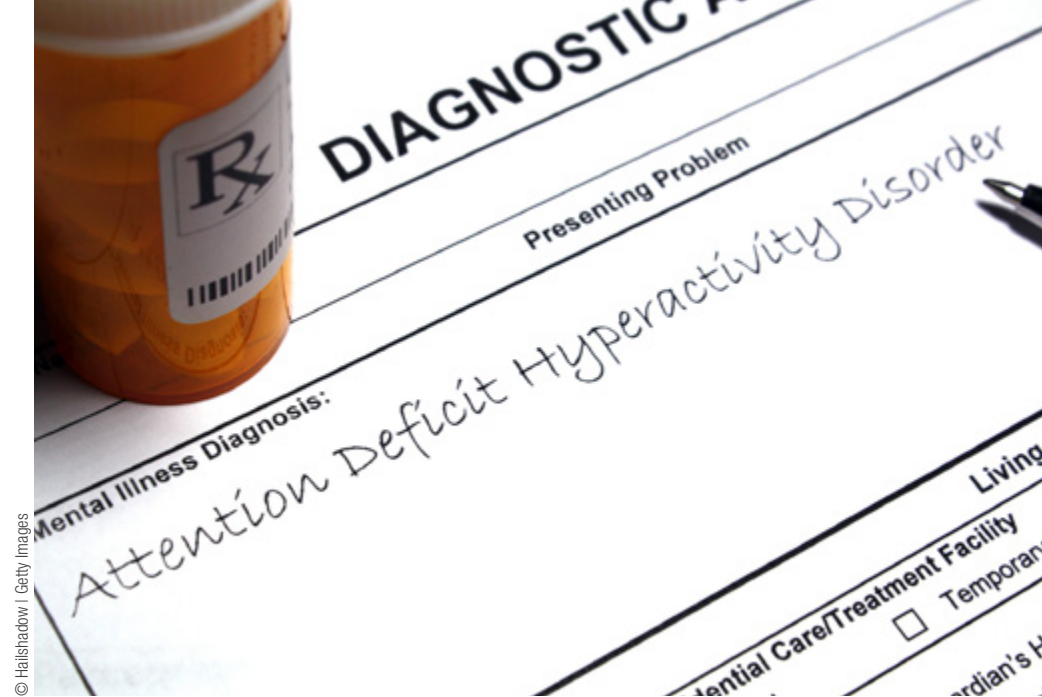
Myths and misunderstandings

Even though identifying all the factors that contribute to ADHD remains an elusive goal, there are several commonly held beliefs about ADHD causes that have not been proved or have actually been disproved.

One of the culprits frequently blamed for ADHD is sugar. Though a steady diet of sugary foods is unhealthy for many reasons, developing ADHD isn't one of them. Studies have found that sugar consumption by itself doesn't make children (or adults for that matter) hyperactive. Instead, it's often the setting for high sugar intake (cupcakes at birthday parties, for example) that contributes to a child's boosted activity level.

Television and video games also draw their share of blame for ADHD. And as more children have access to smartphones and other devices, parents' concerns about how much screen time is healthy or unhealthy are only rising. Research does suggest that excessive time spent watching fast-paced TV or playing rapidly moving video games may affect brain function and make it harder for some people to focus on slower tasks. Setting limits on screen time for yourself or your kids is a wise idea, even if there's no direct connection to ADHD.

One other myth that has caused sleepless nights for many parents is whether a chaotic household or parenting mishaps might cause ADHD. Studies have not found any connection between parenting style or the level of turmoil in a childhood home and risk of developing ADHD. Children and adults with ADHD emerge from a wide range of homes and families. There is evidence to suggest that having a child with ADHD can make a home a little more chaotic, but not the other way around.



Diagnosis

Unlike certain other medical conditions, ADHD can't be diagnosed with a blood test, genetic screening, or other single measure. Instead, a qualified mental health care professional or physician must compile ADHD symptom checklists, complete behavior ratings scales, and gather details of past and current functioning. The input of relatives, friends, and others who know the person well is also particularly helpful in piecing together an accurate profile of someone's challenges with attention, impulsivity, and other ADHD symptoms.

Seeking a diagnosis is the necessary first step in getting help. Too many adults with ADHD allow their symptoms to go untreated. According to the Anxiety and Depression Association of America, about 4% of U.S. adults are believed to have ADHD, but fewer than 20% of them have been diagnosed and only about one-quarter of those diagnosed actually get help.

Impaired attention and restlessness are certainly hallmarks of ADHD, but they are also common symptoms of several mental health disorders. (See "Conditions that mimic ADHD," page 12.) Depression, post-traumatic stress disorder (PTSD), anxiety, and bipolar disorder often feature symptoms that

also are more common in people with ADHD—for example, being easily distracted or having mood swings. So while you might be inclined to self-diagnose your attention problems and impulsive behavior as sure signs of ADHD, it's important to have a broader evaluation.

Criteria for diagnosis

A careful review of symptoms is a big part of ADHD diagnosis. For people 17 and older, at least five symptoms of inattention or five symptoms of hyperactivity must be present for at least six months before an ADHD diagnosis can be made. The symptoms come from two lists established in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.

Conditions that mimic ADHD

Impulsive behavior and difficulty maintaining attention may be hallmarks of ADHD, but they are not exclusive to that disorder. They and other common ADHD symptoms, such as carelessness, sleeping troubles, and forgetfulness, can also be signs of several other conditions that are sometimes mistaken for ADHD.

Because of the potential for a misdiagnosis, it's important not to assume that your restlessness or trouble focusing means you have ADHD. The key is to get a thorough medical evaluation to arrive at a correct diagnosis.

Here are some common conditions that mimic ADHD and the symptoms they share:

- **anxiety:** difficulty concentrating, restlessness, sleep troubles
- **autism spectrum disorder:** impulsivity, having narrow interests not shared with others, trouble shifting focus, time management challenges
- **bipolar disorder:** mood swings, attention challenges, impulsivity, sleep issues, and irritability
- **depression:** being easily distracted, having trouble sleeping, and showing a lack of interest in activities
- **hearing impairment:** attention problems, difficulty following directions, impatience
- **learning disability (such as dyslexia):** inattention, executive function challenges
- **PTSD:** problems with concentration, sleep disturbance, reckless behaviors, angry outbursts, mood swings, lack of interest in former activities
- **sleep disorder:** inattention, forgetfulness, impulsiveness (especially in younger people).

These are the inattention symptoms:

- often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities
- often has trouble holding attention on tasks or play activities
- often does not seem to listen when spoken to directly
- often does not follow through on instructions and fails to finish schoolwork, chores, or workplace duties (for example, loses focus, gets sidetracked)
- often has trouble organizing tasks and activities
- often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework)
- often loses things necessary for tasks and activities (such as school materials, pencils, books, tools, wallet, keys, paperwork, eyeglasses, cellphone)
- is often easily distracted
- is often forgetful in daily activities.

These are the hyperactivity and impulsivity symptoms:

- often fidgets with or taps hands or feet, or squirms in seat
- often leaves seat in situations when remaining seated is expected
- often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless)
- is often unable to play or take part in leisure activities quietly
- is often “on the go,” acting as if “driven by a motor”
- often talks excessively
- often blurts out an answer before a question has been completed
- often has trouble waiting his or her turn
- often interrupts or intrudes on others (for example, butts into conversations or games).



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Fidgeting and a lack of focus on tasks are among the most common symptoms of ADHD.

Other key criteria include the following:

- Several inattentive or hyperactive-impulsive symptoms were present before age 12 years.
- Symptoms must be present in at least two settings, such as at home and work, or at home and out with friends.
- Symptoms interfere with daily functioning or reduce the quality of work or functioning in relationships and social situations.
- The symptoms can't be explained by other conditions, such as anxiety, hyperthyroidism, a mood disorder, or other mental or emotional challenges.

Getting started

The first formal step in screening for ADHD is going through the list of *DSM-5* symptoms with a mental health professional, as well as sharing your own observations. The consultation will likely include a review of your medical history, medications, and questions about your family history (in particular, whether you have relatives who had ADHD or demonstrated ADHD symptoms). Sharing your observations about your social history, such as a pattern of relationship or friendship problems that could be due to ADHD-like behaviors, will help. Be sure to describe your work history as well if it appears to reflect ADHD-related problems.

Bringing along a spouse, sibling, or someone else who has known you a long time and could speak about your symptoms can be very helpful. It's important that the person be forthcoming and honestly share what he or she has observed. Holding back in order to avoid embarrassing you will not help the process. Hearing from multiple people with different perspectives—especially those who knew you when you were younger and those who see you regularly now—can also give your doctor useful information.

Testing for ADHD

Once the review of symptoms and interviews with those close to you are done, you may be asked to take one or more tests to help confirm or rule out an ADHD diagnosis.

One type of test is known as a behavior rating scale. There are several rating scales used for children and adults. They ask questions such as how often you have difficulty completing a project once the difficult parts have been done and how often you have difficulty concentrating on what people say to you, even when they are speaking to you directly. Based on your

answers (never, rarely, sometimes, often, very often), you receive a score. That score adds to the other tools used in making a diagnosis. One of the more common rating scales for adults is the Adult ADHD Self-Report Scale.

Remember that although many types of ADHD questionnaires and other similar material can be found on the Internet, most of these items aren't standardized and shouldn't be used to diagnose yourself or anyone else.

In addition, intelligence (IQ) tests can help provide a fuller picture of your cognitive health and may also detect learning disabilities, which often accompany ADHD. You may also undergo tests for specific abilities, such as memory recall, motor skills, and other functions.

Because emotional and psychiatric conditions such as anxiety and depression sometimes accompany ADHD, you may be advised to go through screenings called broad-spectrum scales to look for a mood disorder or other condition. This process is sometimes made more complicated because moodiness, for example, is a common feature of ADHD and bipolar disorder. Some researchers and clinicians believe that difficulties with regulating emotions and mood should be part of the formal diagnostic criteria for ADHD.

Some computer-based tests can help with an ADHD diagnosis. These continuous performance tests measure sustained attention by seeing how long you can stay on tasks while responding to various prompts on the screen. Simultaneous measures of movements during the test further increase its value for diagnosis.

In doing research on ADHD, scientists have also used brain imaging, such as positron emission tomography (PET) scans. You don't need a brain scan



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Diagnosis of ADHD starts with meeting with a mental health professional and reviewing your symptoms and your social, work, and school history.

to be diagnosed with ADHD. If your doctor recommends it, ask why and discuss the risks and benefits of brain imaging. PET scans and other imaging tests, such as magnetic resonance imaging, have not been proved to be effective diagnostic tools for ADHD.

A lifetime challenge

One of the keys in diagnosing adults with ADHD is determining if symptoms have been present all their lives or if they started recently. Symptoms that have appeared only recently are probably not signs of ADHD, but are of serious concern and call for a thorough evaluation. Numerous other conditions can lead to the adult onset of problems with concentration, attention, and organization. (See “Conditions that mimic ADHD,” page 12.) These symptoms may be a consequence of a mood, anxiety, personality, or psychotic disorder. They can result from recent trauma or loss as part of post-traumatic stress disorder or bereavement. Alcohol and drug use can interfere with

attention and organization, and so can a host of neurological and sleep disorders. Medication side effects are another possible cause.

To receive a confident diagnosis of ADHD as an adult, you must have had attention issues for most of your life. It's important to remember that symptoms can change over time. They may be mild at times, but more severe or more frequent at other times. They may be present only in certain situations, such as work or home, and not in other environments. Stress and poor sleep, for example, can be triggers for worsening ADHD symptoms.

To help understand your ADHD history, in some cases, a doctor may ask to see your childhood report cards and talk with longtime family members to get a sense of when attention challenges started. When you are asked about possible ADHD symptoms, it's important to be honest, as these kinds of questions are sometimes the most helpful in making a diagnosis. Certain behaviors or traits, such as frequent mood swings, may not seem like ADHD signs to you. But because they are common in people with ADHD, these clues to your personality may help a licensed professional make an accurate diagnosis.

Some people with ADHD can get through school because the structure of a regular class schedule and having teachers and parents guiding them and making sure work gets done are enough to overcome the problems with attention, procrastination, and organization. Adults who have assistants at work or a spouse to help manage the details or who have jobs that don't require a lot of organizing and decision making also may get by for a long time without ADHD symptoms interfering too greatly in their lives.

In some cases, it's when a person retires, divorces, or becomes widowed that the real signs of ADHD emerge. Without someone setting your schedule or reminding you of appointments and other matters, your ADHD can get the better of you.



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Retirement or the loss of a spouse may reveal ADHD symptoms that had been hidden when someone else managed your schedule.

Do you have ADHD? Questions to ask yourself

In looking back at their time in school, their work history, and the ups and downs of relationships with family, friends, and romantic partners, people with ADHD may be able to see clues in past behaviors. Some self-diagnosis may be helpful as you start to understand your condition, but should also lead you to someone who can confirm or rule out ADHD.

Some key questions to ask yourself before you see a psychologist or other mental health professional:

- What was I like as a student? Was I easily distracted in class? Did I procrastinate a lot? Did I have trouble starting and completing homework and projects? Was I restless much of the time?
- If I had trouble holding a job or getting promoted, why did that happen? Did I bounce from one job to another out of boredom or restlessness? Was my work performance poor or inconsistent?
- Have I not lived up to my potential? If not, why not?
- Do I make a lot of careless mistakes?
- Do I tend to misplace things frequently?
- Have I failed to keep promises or forgotten important information?
- Have the criticisms or observations I've received in life been consistent with the issues related to ADHD?

Getting the diagnosis

If an ADHD diagnosis is made, you may feel relieved that there is finally a medical explanation for the symptoms that have so often interfered with school, work, relationships, and everyday living. While nobody wants to have ADHD, there is some comfort in knowing what you're dealing with, having the words to describe your condition, and understanding that there is ongoing research to improve treatment and develop new coping strategies.

At the same time, you may feel discouraged or embarrassed that you have a condition associated more with children or one that may feel more like a weakness (which it is not) rather than a medical condition. Despite the best efforts of health care professionals, educators, and ADHD activists, there remains a stigma about ADHD that can be hard to ignore.

You may also be nervous, concerned that you're looking at a lifetime of medication and other treatments. But managing ADHD may be less daunting than you imagine. Getting the diagnosis should be the start of many conversations about treatment options and how best to manage symptoms in the years ahead.



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Treatment

ADHD has no cure, but medications and behavior strategies can help reduce symptoms and improve functioning. The mainstays of treatment for ADHD are medications, psychotherapy, and various forms of coaching and coping techniques.

Just be aware that the initial dose of ADHD medication may not be strong enough to get the desired result, or may be too strong, or be ineffective. You and your doctor may need to try adjusting your dose or changing your medications. Some trial and error also may be required to find the right behavioral strategies to help you control your symptoms. Environmental and lifestyle changes may also be necessary to ease certain symptoms.

Treating ADHD is an ongoing process, even when you find the right mix of medication and counseling. As you get older, for example, the nature of the disorder may change. Or a chronic illness may bring on stress that exacerbates symptoms and requires adjusting your treatment.

Medications

Medications are considered first-line treatments for ADHD, though it is also important to get regular counseling and develop strategies to help with increasing attention and tamping down impulsive behavior. ADHD medications can reduce hyperactivity, impulsive behavior, and attention problems, allowing you to perform better at home, on the job, and in school, and to function with more consistency and success in your daily life.

Two general types of medications are used for adults with ADHD: stimulants and nonstimulants. If you take stimulant medications or other drugs listed under Schedule II of the federal Controlled Substances Act, you may need to meet with the prescribing provider once every three months. Commonly prescribed Schedule II medications for ADHD include amphetamines (Adderall) and methylphenidate (Ritalin). Appointments with your prescribing provider may be brief updates on how you're doing or more involved conversations about symptoms or side effects, if any.

Stimulants

Though it may seem counterintuitive to give stimulants to someone who already seems “wired,” these are the medications used most often for ADHD. Stimulants can help manage a short attention span and impulsive behavior.

There are two major classes of stimulants: methylphenidate (Concerta, Ritalin) and amphetamines such as Adderall, which is a mixture of amphetamine and dextroamphetamine salts. These drugs help raise the levels of dopamine and norepinephrine by blocking their reuptake and deactivation. Amphetamines also act to stimulate the release of these neurotransmitters. By helping to keep more neurotransmitters facilitating messages between neurons, these medications improve the activity of brain regions responsible for attention and other key functions that otherwise suffer because of ADHD.

Interestingly, while stimulants can actually reduce the level of stimulation in people with ADHD—allowing them to sit and

focus on their work—these drugs can have the opposite effect in healthy people by overstimulating the brain.

Stimulants have widespread benefits in controlling the core symptoms of ADHD. As a result, adults and children with ADHD tend to complete tasks more consistently, sustain their focus longer, fidget less, interrupt conversations less often, and enjoy improved relationships.

Stimulants are effective in about 70% of adults and 70% to 80% of children with ADHD. However, individuals often respond much better to one class of stimulants than to the other, so if the first drug you try is not very helpful, it's worthwhile trying one from the other class.

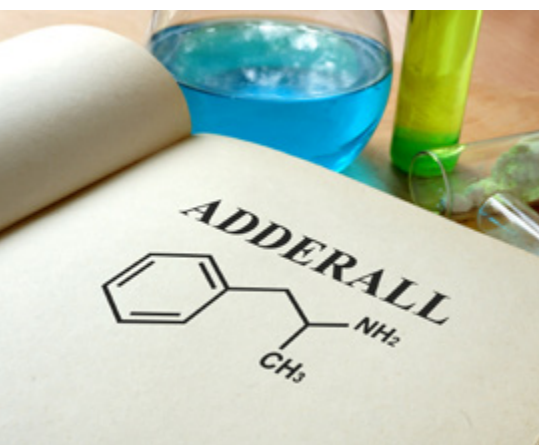
Stimulants are available in short-acting (immediate-release), intermediate-acting, and long-acting forms. Short-acting medications are usually effective for three to six hours, and can be especially helpful for projects or classes that require short bursts of focus and attention. Some people take two short-acting pills in a day, depending on their needs. Long-acting forms release medication throughout the day. They are helpful if you need symptom relief for long stretches and don't want to have to remember to take more than one pill per day.

Nonstimulants

Atomoxetine (Strattera) is sometimes prescribed instead of stimulants for older children and adults. This drug enhances the action of norepinephrine throughout the brain and the effects of dopamine within the prefrontal cortex. Atomoxetine can help improve attention, decrease problems with hyperactivity and impulsivity, and reduce anxiety and other emotional symptoms of ADHD.

The FDA requires manufacturers to provide a boxed warning regarding atomoxetine's use among children and teens, because people in this age group who took the medication in early studies had a higher risk of suicidal thoughts. There was no such increased risk in adults with ADHD.

Extended-release versions of clonidine (Kapvay) and guanfacine (Intuniv) are approved for children ages 6 to 17 and are often prescribed to adults with ADHD. These drugs stimulate a specific class of receptors in the prefrontal cortex that are responsible for some of norepinephrine's beneficial effects on attention, short-term memory, and the capacity to sit still and inhibit impulses. Unlike stimulants or atomoxetine, these drugs can cause drowsiness, so they are often prescribed to be taken at night. They can be used alone or to extend the benefits of stimulant medications. In particular, they can help during the evening hours without interfering with sleep.



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Either stimulant medications, such as Adderall, or certain nonstimulants can be prescribed for ADHD.

Cautions about ADHD medications

It's important to remember that it can take some time to find just the right drug and the right dosage to effectively manage symptoms and keep side effects to a minimum.

As with any drug, stimulants and nonstimulants prescribed to treat ADHD can be abused or used incorrectly. Reports have emerged from many college campuses of students without ADHD taking Ritalin or Adderall as they look for an extra edge in studying for exams or finishing papers. However, people who take stimulants for ADHD as prescribed do not appear to have an increased long-term risk of addiction or substance abuse. Those who choose to abuse these medications may nonetheless grow dependent on them.

Stimulants, such as Ritalin or Adderall, can also produce unpleasant side effects. Some of the more common side effects for adults and children are

- loss of appetite
- dizziness
- nausea
- racing heart rate
- headache
- insomnia.

Atomoxetine, a nonstimulant, has negligible risk for addiction or dependence. It does have some potential side effects. For adults, they include

- dry mouth
- painful menstruation
- constipation
- urinary tract problems, including pain while urinating.
- insomnia
- erectile dysfunction

People taking stimulants or atomoxetine have had rare but potentially severe side effects such as abnormal heart rhythms, heart attacks, stroke, seizures, liver failure, thoughts of suicide, and new symptoms of mania, depression, or psychosis. Your doctor should carefully assess your individual risk factors, such as heart disease and other psychiatric disorders, and monitor you closely while you are taking ADHD medicines.

Clonidine and guanfacine are not stimulants and have no known potential for abuse or dependence. These drugs do have some potential side effects. For adults, they include

- sleepiness
- constipation
- tiredness or fatigue
- dry mouth
- irritability
- decreased appetite
- insomnia
- dizziness.
- nightmares

Potentially serious side effects include low blood pressure and reduced heart rate, which can lead to fainting. If you abruptly stop taking the medicine,

there's a risk of rebound high blood pressure. Your doctor should monitor your heart rate and blood pressure before starting these medications and at regular intervals while you are taking them.

For older adults who take several types of drugs, ADHD medications may lead to some harmful interactions. Make sure that your doctor knows all of the medicines you take, including over-the-counter medicines and supplements. If you have a heart condition, you may not be able to take a daily stimulant safely.

Myths about medications

There is no shortage of misunderstandings or misconceptions about the medications used to treat ADHD. Here are some of the more common myths and facts about this treatment.

Myth: ADHD stimulants are usually addictive and lead to other drug problems.

Fact: While any drug can be misused or abused, when taken as directed by a physician, ADHD medications are not addictive. The key is that they should be taken only by people who need them, and should never be consumed outside of the prescribed regimen. Because the risk of alcohol and drug abuse is elevated among teenagers and adults with ADHD, many people have assumed ADHD drugs were the cause. A study led by researchers at Harvard University found that individuals getting proper treatment actually have a greatly reduced risk of alcohol or drug abuse than their peers who are not being treated for their ADHD. Because the latter are not being treated, their impulsive tendencies make them more likely to abuse drugs and alcohol.

Myth: Psychological counseling should always be tried before medications.

Fact: There is certainly no harm in trying nondrug treatment options for ADHD, such as talk therapy. However, medications have been shown to be safe and effective for most adults with ADHD, and in most cases are more effective than psychological or behavioral therapies. Ideally, adult ADHD would be treated with a combination of medications, talk therapy, and development of coping strategies, including avoidance of symptom triggers.

Myth: The brain abnormalities seen in people with ADHD are caused by medications.

Fact: Several studies have used neuroimaging to show that brain abnormalities are seen in people with ADHD who have not been treated as well as those who have been treated. This research suggests that ADHD drugs are not responsible for abnormalities in brain structure or function.

Nondrug treatments

Despite the overwhelming success of medications in treating adult ADHD, some doctors are hesitant to prescribe them to certain individuals, especially older adults, who have a greater risk of drug interactions. If you are having trouble with everyday functioning because of ADHD, then trying drug treatment makes sense. If the impact of ADHD is minor and you've figured out coping strategies without a formal diagnosis and treatment plan, your doctor may instead advise treatments that don't involve medications.

It's important to remember that ADHD symptoms exist on a spectrum, so your symptoms may be milder, more severe, or otherwise different than someone else who also has the disorder.

The treatments and strategies presented below, in no particular order, are some of the most common ones that have been helpful for individuals with ADHD.

Cognitive behavioral therapy

One widely used approach in treating adult ADHD is cognitive behavioral therapy (CBT). This type of psychotherapy helps people change negative and unhelpful thought patterns into positive, healthier ways of thinking. The idea is that if you change the way you think about a situation, your feelings and behaviors can change, too. For example, CBT may help change a thought such as "I can't do anything right" and replace it with a better understanding that impulsive behaviors or choices sometimes turn out poorly, but taking time to think things through may lead to better decisions.

CBT is very focused on giving you tools to help deal with stresses and challenges in life. Working on self-esteem is often a very important aspect of ADHD treatment.

Emotional therapy

While efforts to improve attention and organizational skills may be at the forefront of concern, it's important to remember the emotional symptoms and complications of ADHD as well.

ADHD is not just about paying attention in conversations and in meetings. ADHD can lead to frequent emotional ups and downs, which can hamper relationships and everyday activities. Just waiting in line can make a person with ADHD quite irritable. So can minor setbacks, such as having a project not turn out quite right or having a boss who changes deadlines or who demands more work at the last minute. And people with ADHD can often

feel discouraged or frustrated when they don't complete their work and guilty or sad that they let others down.

It may help to find a psychiatrist or another type of therapist and meet regularly to discuss your symptoms and any challenges or successes in your life. Over time, you may feel that ongoing therapy is no longer necessary. If your symptoms seem under control and you are no longer experiencing ADHD-related challenges at work or in your personal life, then discuss with your therapist the idea of meeting less frequently.

It's also common for adults with ADHD to have other mental health conditions. An estimated 50% of adults with ADHD, for example, also have an anxiety disorder, according to the Anxiety and Depression Association of America. Having ADHD along with another condition can severely interfere with daily functioning.

If ADHD is the cause of anxiety, then effectively treating it may take care of the anxiety. If the two conditions exist independently of each other, you'll need to work closely with your doctor on treatment for both, especially if medications are prescribed.

Neurofeedback

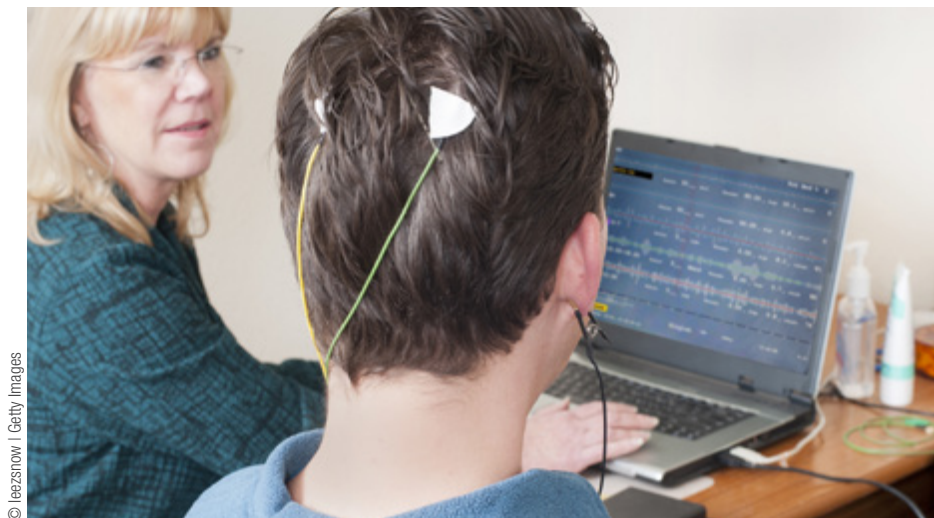
Neurofeedback allows people with ADHD to train their attention based on immediate feedback about their level of brain activity, monitored by a machine called an electroencephalograph (EEG). Brain signals pass from one or more leads placed on your head to a computer, which translates the signals into a video or audio display.

People with ADHD often have excessive slow-wave activity in frontal leads, indicating reduced frontal brain activity. Through neurofeedback, you can learn to do tasks that may enhance the function of the prefrontal cortex by suppressing slow-wave activity and increasing higher (that is, faster) frequencies.



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Many people with ADHD also have other mental health conditions. Psychotherapy may be helpful in treating those conditions as well as ADHD.



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Neurofeedback may benefit people with ADHD by increasing activity in the prefrontal cortex. However, such a course of treatment may be lengthy and costly.

The technique is noninvasive and painless. However, treatment typically requires 40 to 80 sessions, which can be time-consuming and expensive.

Interestingly, a carefully controlled study of EEG neurofeedback in 2021 found that 38 sessions of either active or sham treatment led to marked improvements in parent and teacher ratings of inattention in young children with ADHD. The perceived improvements were comparable to the best combined effects of medication and therapy. These benefits were fully sustained 13 months later in the active treatment group and deteriorated only slightly in the sham group. This study suggests that both groups received sustained benefits but that decreasing slow waves and enhancing higher EEG frequencies was not the critical factor, which remains to be determined.

Treating other conditions

Individuals with ADHD often meet criteria for multiple psychiatric disorders. Some of the most common diagnoses seen in adults with ADHD are major depression, anxiety disorders, substance use disorders, personality disorders, post-traumatic stress disorder, and bipolar disorder. Addressing these conditions is a critical part of a comprehensive treatment plan and may take precedence over treating ADHD.

For instance, there is substantial overlap between symptoms of ADHD and bipolar disorder. Stabilizing mood would be the first step in treating

someone with this dual diagnosis. At this point, it would make sense to reassess whether the person still has clinically significant symptoms of ADHD.

Coping through coaching

Some of the best outcomes for adults with ADHD result from a combination of medications, talk therapy, and coaching. Coaching can help them learn practical strategies that assist with daily functioning and long-term planning.

Calendars, planners, daily “to do” lists, and other reminders can help. Setting a routine that takes the guesswork and prioritizing out of the picture can simplify the lives of adults with ADHD. Coaching can also focus on things like motivation and organization, as well as impulse control and avoiding or reducing exposure to situations that can trigger ADHD symptoms.

What is an ADHD coach?

ADHD coaching is a relatively new way of helping children and adults with the condition. It’s an aspect of executive function coaching, which helps all kinds of people deal with challenges that interfere with achieving their goals. It covers areas such as concentration, organization, decision making, planning, and other functions.

An ADHD coach is usually a licensed mental health professional who specializes in working with people who have ADHD. Others may be teachers with a strong background in ADHD and special education.

A case study reported in 2019 in the *Permanente Journal* found that an eight-week collaboration between a psychiatrist and a health and wellness coach helped an individual with ADHD complete graduate studies and adopt behavioral changes that lasted at least as long as the six-month study period. The findings suggest that, at least for some people with ADHD, working with a health and wellness coach may lead to some productive outcomes.

The national organization Children and Adults with Attention-Deficit/Hyperactivity Disorder keeps updated listings of ADHD coaches in communities around the country. (See “Resources,” page 23.) You may also be able to find coaches by searching online or by inquiring at a local hospital or health care facility.

Coaching strategies

The following strategies have been helpful for many people with ADHD.

Use lists to plan your day and week. With the assistance of a coach or even a spouse or family member, learn to prioritize your activities and rely on lists to



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Tools on a smartphone can be helpful for keeping track of a schedule and other important information.

Update your lists. Taking just a few moments to reset your schedule and get organized will be time well spent.

Use the tools on your smartphone. They can be a great help for organization. For example, the phone allows you to set appointment reminders, highlight important days on the calendar, mark deadlines, and keep lists and other information handy. Consider smartphone apps to help you, especially if keeping track of written lists is difficult. There are apps that set reminders, organize notes and to-do lists, track projects, and help you relax when you start to feel overwhelmed.

Be careful, though. Smartphones can also turn into a distraction. People with ADHD can easily spend hours using smartphone apps that are less helpful. If you are among those people who can lose many hours on your phone, set a timer for each use or keep the phone off or in another room when you are trying to work.



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Reducing clutter removes some distractions and allows you to keep the things you need close at hand.

help keep you organized. But be realistic about what you can accomplish in a given amount of time. Better to set a few doable goals than overwhelm yourself with an ambitious, but impossible set of tasks.

Set aside organizational time. Spend a few minutes in the morning and the afternoon, cleaning your desk or refocusing on the work ahead.

Declutter your home and office. Creating space to keep your most important things easily accessible and removing distractions from your environment can help anybody, whether or not a person has ADHD.

Reduce distractions. This could mean changing your workstation so it doesn't face a window or asking to move

to a part of your office that is quieter. And don't try to get work done at home while the television is on or other distractions are around you.

Jot down ideas as they come to you. But don't let them derail your day. If you have an idea for a meal you'd like to make or a movie you'd like to watch later, write it down and then look into it later, after your more pressing work is finished.

Don't procrastinate. It's easier said than done, but dealing immediately with emails, phone calls, or other matters that have to get done means there will be fewer things hanging over your head and overwhelming you later on.

Be a clock watcher. Get a watch and get in the habit of using it. The more aware you are of time, the more likely you'll be able to avoid taking too long on a task.

Take one thing at a time. Multitasking is overrated for everyone—and it's a nightmare for people with ADHD. Focus on completing one task and then move on to the next.

Be realistic about your time. This can mean having to say no to new projects or other commitments. The more you can refuse unnecessary commitments and see that it's not the end of the world, the less cluttered and overwhelming your schedule will become.

Use convenient financial tools. For example, online banking, bill pay reminders, and personal finance software can help you to organize your finances. Consider working with an accountant for taxes and other matters if your budget allows and your financial demands warrant the extra help.

Repeat new information. Saying things out loud and writing down new information can help you remember it.

Get up and move. It's not a good idea for anyone to sit too long without moving around. But for someone with ADHD, a little physical activity throughout the day is an easy prescription to fill. Instead of a sit-down



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Writing down ideas and making lists can help you to be more organized.

meeting with a colleague, consider talking as you take a walk. Try taking the stairs instead of the elevator. It's good for your heart and helps to keep you alert.

Adopt a healthier lifestyle. In addition to exercising more, take up these healthy habits:

- Try to get seven to eight hours of sleep a night.
- Eat a healthy diet without a lot of added sugars, sodium, and saturated fat.
- Drink alcohol in moderation, if at all.
- Counteract stress with meditation or yoga or by engaging in other activities that you enjoy.

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Living with ADHD

Living without a formal diagnosis of ADHD but with all its symptoms can be difficult for the individual as well as relatives, romantic partners, co-workers, teachers, and friends. It can be wearying and frustrating trying to explain that you don't mean to tune out conversations or misplace things.

Without the vocabulary and the tools necessary to understand ADHD yourself, conveying the effects of the disorder to others is often a losing battle. When words can't explain what's going on in your head, it can lead to damaged relationships at home and at work.

But if you seek an ADHD evaluation and it confirms you have the disorder, then you can tackle it head-on, accepting the challenges rather than ignoring them. You'll have answers for yourself and others, and will have a better chance at living the life you want. Accept your differences, and focus on your strengths, gifts, and talents.

It's also important not to waste time wondering what's wrong. If you have some suspicion you have ADHD, get an evaluation and take it from there.

With a diagnosis, you can not only receive treatment to control symptoms, but you can educate others about this common problem. They may be more understanding and willing to help if they are included in your treatment.

There is no cure for ADHD, but effective symptom management can reduce its impact on your quality of life. Just remember that each person's experience with ADHD is unique. Some people rely on medication, coaching, and therapy well into older age, while others "outgrow" their symptoms or learn to manage them so well that the disorder is no longer a factor in their everyday lives. You may need medication only when working, but get through the weekends or vacations fine without it.

And still other people with ADHD enjoy long stretches in which their symptoms are not noticeable or problematic. But if their lives take a stressful turn or if they lose a spouse or partner who helped keep things organized at home, those attention challenges can re-emerge. Be open and understand that the nature of your ADHD can and probably will change through the years.

As with any chronic condition, the key to living successfully with ADHD is taking it seriously and following your doctor's instructions when it comes to medications and strategies. It can also mean relying on a spouse or someone close to you for help in staying organized.

Living with ADHD also may make you more sympathetic to people with other challenges. You may be better able to provide support and encouragement to someone else with ADHD, anxiety, or another mental health issue.

Most importantly, remember that ADHD doesn't define you, nor should it limit you. The list of successful people with ADHD is long and impressive, and includes prominent individuals such as gymnastics champion Simone Biles and astronaut Scott Kelly. ADHD is a feature, not an identity. You are the sum total of the experiences you've had, your thoughts, feelings, imagination, and dreams.

Be optimistic about what's ahead. A diagnosis of ADHD can lead to treatment and a better quality of life.

Frequently asked questions

Living with ADHD can lead to endless questions about what the condition means for your future. Here are some common questions and answers:

Will I always have ADHD?

ADHD is a lifelong condition, but the severity of symptoms can change throughout your life. With medications, coping strategies, or both, most people can control symptoms. And many adults with ADHD report that some symptoms tend to fade with time or at least become far less intrusive.

If I have ADHD, will my children also have it?

As with many medical conditions, ADHD has a hereditary element. However, there's no guarantee that you will pass it down to your children. It's estimated that there's about a 35% to 50% chance that a parent with ADHD will have a child with ADHD.

Do I need to change my diet?

There hasn't been much research into the idea of an ADHD diet. The general advice is to follow a healthy, balanced diet that is rich in vegetables, fruit, lean proteins, and whole grains. Limit foods with added sugars, and high-glycemic foods, such as white rice and products made with white flour. And watch your caffeine intake. Some people with ADHD find a noticeable increase in restlessness and inattention after consuming caffeine. Others find that moderate caffeine consumption has little impact.

Is there anything I could have done to prevent ADHD?

While scientists still don't know everything about the causes of ADHD, there don't appear to be any steps an individual can take to prevent adult ADHD. Avoiding situations that could lead to a brain injury or exposure to certain environmental toxins may be ways to lower your risk. Generally speaking, however, your lifestyle choices have little to do with whether ADHD ever develops.

Resources

American Psychiatric Association

www.psychiatry.org/patients-families/adhd/what-is-adhd

The website of this professional organization for mental health professionals provides resources for people with ADHD, including information on symptoms and treatments, questions answered by experts, and a collection of stories from people dealing with the condition.

Attention Deficit Disorder Association

www.add.org/resources

This nonprofit organization is aimed at helping people with ADHD and their families with extensive information about the condition, videos, webinars, ADHD tests, a directory of ADHD professionals, support group contacts, and more.

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)

www.chadd.org

CHADD provides information about ADHD in children and adults and keeps updated listings of ADHD coaches and other local resources.

National Human Genome Research Institute

www.genome.gov/Current-NHGRI-Clinical-Studies/ADHD-Genetic-Research-Study-at-NIH

This agency is responsible for a long-term study of ADHD and how genetics may play a role in its formation as well as treatment. The website explains how members of the public can get involved in the research.

National Institute of Mental Health

www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd

This federal agency provides information about ADHD, new research, and ways to join studies of new treatments or diagnostic tools, as well as instructions for obtaining National Institutes of Health publications about ADHD and related topics.

OTHER PUBLICATIONS FROM HARVARD MEDICAL SCHOOL

The following publications give more in-depth information on topics related to this report. You can order them via telephone at 877-649-9457 (toll-free) or online at www.health.harvard.edu/reports.

Harvard Special Health Reports

Anxiety and Stress Disorders: A guide to managing panic attacks, phobias, PTSD, OCD, social anxiety disorder, and related conditions

Stephanie Collier, MD, MPH, Medical Editor

(Harvard Medical School, 2021)

Improving Memory: Understanding age-related memory loss

Kirk R. Daffner, MD, Medical Editor

(Harvard Medical School, 2022)

Understanding Depression: The many faces of depression—and how to find relief

Michael Craig Miller, MD, Medical Editor

(Harvard Medical School, 2020)

Improving Concentration and Focus: Factors that may undermine attention and what you can do about them

Albert M. Galaburda, MD, Medical Editor

(Harvard Medical School, 2022)