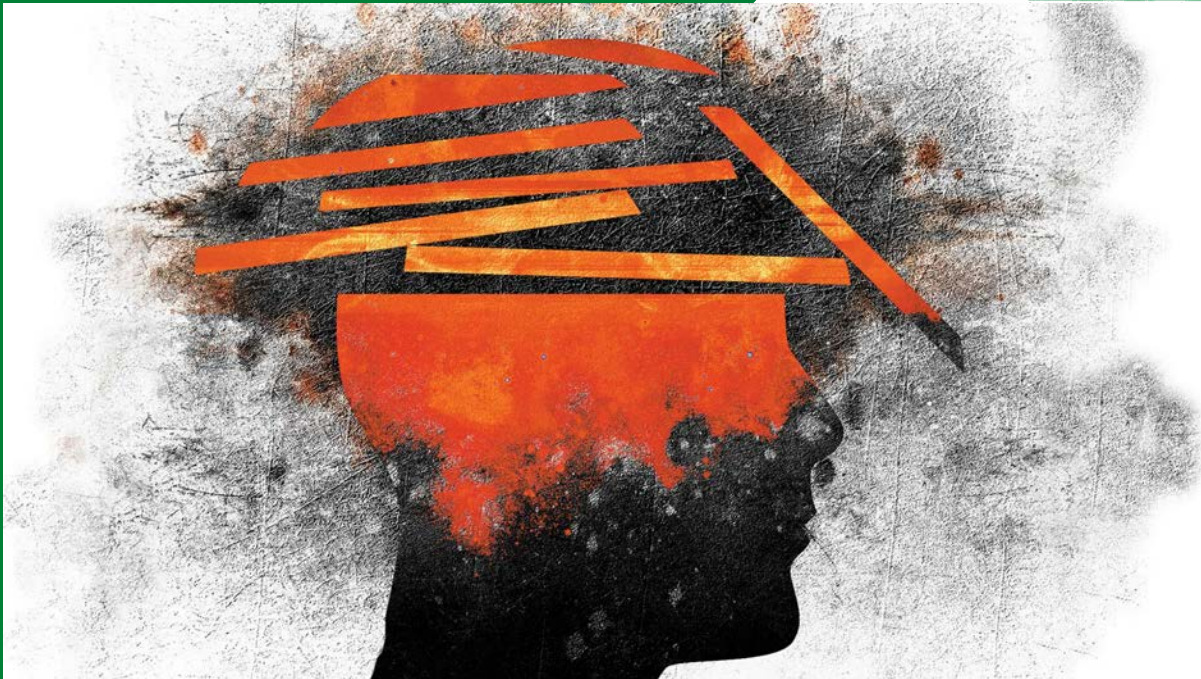


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ADHD + Trauma ***Untangling Causes,*** ***Symptoms & Treatments***

ADHD may cause trauma, and vice versa. Here, learn how to untangle symptoms and how an emerging natural remedy called somatic therapy can help patients heal psychological wounds by reconnecting the body and the brain

ADHD and Trauma: A Complicated Relationship

Imagine the intricate complexities of a spider's web – one thread attaches to dozens of others; pull just one silky strand and the entire web collapses. Living with attention deficit hyperactivity disorder (ADHD or ADD) and trauma can feel similar – the symptoms are so intertwined a single tug may cause the whole thing to cave in.

Studies show that experiencing trauma increases a patient's chances of being diagnosed with ADHD.¹ What's more, teasing out the origins of a patient's trauma – and assessing its impact on the brain and body – can be complicated since many symptoms of trauma overlap with (and may be caused by) ADHD.¹ Symptoms shared by ADHD and trauma, and often ADHD and PTSD, include:

- Difficulty concentrating
- Poor memory
- Emotional dysregulation
- Interrupted sleep
- Impulsivity and/or restlessness
- Problems connecting with others
- Substance abuse

Is It ADHD or Trauma? It's Complicated

ADHD and trauma present similarly; accurately assessing and treating them requires skill and experience. For example, poor working memory is associated with ADHD, but also may be the hallmark of a mind avoiding thoughts of a traumatic experience. Practitioners must understand ADHD and trauma to treat a patient effectively.

Typically present in early childhood, ADHD is a brain-based disorder often diagnosed after a child struggles in school, or even later in life. Trauma is the result of exposure to stressful events or experiences that can occur at anytime during a person's life. Childhood trauma that occurs when the brain is developing may lead to cognitive and emotional changes that resemble ADHD.

Up to 70 percent of adults report experiencing at least one traumatic event in their lifetime.³ The death of a loved one, divorce, car accidents, caregiver abuse or neglect, living through a natural disaster, experiencing racism, being the victim of a crime or witnessing one – these can all impact the way a person thinks or feels.

Though not all trauma has lasting effects, some trauma becomes chronic with persistent symptoms associated with PTSD. These include nightmares, frightening flashbacks, intrusive thoughts, avoidance of things associated with the trauma (traveling in a car, for example, if trauma was triggered by a car crash), emotional dysregulation, and hypervigilance.

However, a patient may have trauma-based nervous system dysregulation and not have PTSD. Other trauma-spectrum symptoms (which are also common in PTSD) include anxiety, low mood, difficulty concentrating, numbing (lack of emotion), and feelings of shame and guilt. Trauma symptoms also include physical manifestations, such as headaches, nausea, shaking, chest tightness, shallow breathing, and lightheadedness. 3,4

How ADHD Causes Trauma

Co-occurring ADHD and trauma are more common than previously thought. People with ADHD are often bullied, feel that they don't fit in, struggle academically and socially in school, and are admonished by adults for behaviors over which they have little control.

The body's chronic stress response is commonly referred to as the "fight or flight" response. Another name for it is "sympathetic arousal," because it is an activation of the sympathetic nervous system. Sympathetic arousal is the body's involuntary response to danger and causes adrenaline and cortisol to rush through the body, heart rate to increase, muscles to become tense.

If this response happens repeatedly – as it does for individuals with ADHD navigating daily disappointments, admonishments, and blows to their self-esteem – the body learns to treat everything it encounters as a dangerous threat. Over time, it creates fixed action patterns in the body's tissues, such as habitual muscle tension (clenching jaw or raised shoulders), digestive distress, and neurons that fire the same way repeatedly (defensive behavior patterns). All of these are signs of dysregulation. The nervous system has learned to respond to past events as if they are happening in the present.

Think of the nervous system as our body's version of a building's electrical wiring. The brain is the fuse box. The nerves are the wires that extend throughout the body. Our wires contain billions of neurons that communicate via neurotransmitters much like electricity – jumping from one neuron to the next.

In people with ADHD and trauma, the neurological functioning becomes altered and dysregulated, causing the wiring to fire differently. This begs the question, what is the cause of impaired neurological functioning? ADHD and trauma are so interrelated, we may never be able to tease them apart. So how do we move forward? We treat both.

Untangling the Web: Treating ADHD and Trauma

If we only treat one condition or the other, the untreated condition will mask any significant progress in the treatment of the other. People with both ADHD and trauma need strategies for executive functioning, but in order to regulate the nervous system, they must also process the trauma.

ADHD medication is a good place to start because it is a well-researched treatment for both disorders. If pharmacological interventions are successful, life becomes more manageable, and therapy more effective. True healing can begin.

For example, when a stimulant medication improves sustained focus, behavior treatment can center around regulating the nervous system, rather than managing the disorganization. Antidepressants, like selective serotonin reuptake inhibitors (SSRIs), can help lessen emotional extremes, so that the difficult work of processing trauma is more accessible.

Using Somatic Therapy to Treat ADHD and Trauma: A Natural Remedy

Somatic therapy (or somatic psychotherapy) is an emerging, holistic treatment modality that can be used to simultaneously treat comorbid ADHD and trauma. It is the umbrella term for a group of body-based or body-mind therapies. Not to be confused with bodywork involving physical touch, somatic therapy is conducted by licensed mental health practitioners typically trained in both traditional talk therapy and somatic therapy. Their focus is on treating the whole person and fostering reconnection between the brain and body.

Somatic psychotherapy has evolved over the past 50 years as different practitioners observed how the body responds to trauma – as a chronic stress response in the nervous system and fixed action patterns in the tissues.

These practitioners observed that if therapy engaged with the physical sensations of the trauma, rather than the narrative “story” of the trauma, the thought patterns associated with the trauma would eventually shift and in some cases resolve. These observations led to the research and development of multiple therapeutic modalities.

The central objective of somatic therapy is healing or regulating, the nervous system. If the nervous system is stuck in survival mode, the symptoms of ADHD become intensified. Regulating the nervous system may not eradicate symptoms of ADHD, but improving the function of the nervous system (the mastermind of the body) can have ripple effects in every aspect of life.

Somatic therapy increases awareness of the sensations in the body to give the patient a roadmap to understand what they mean. It has been studied as a treatment for trauma, but not as a treatment for comorbid trauma and ADHD. The cousin of somatic therapy, eye movement desensitization and reprocessing (EMDR), has been studied as a treatment for both with promising results, though further research is needed.⁵ There is some evidence that treating both trauma and ADHD improves the symptoms of both.^{6,7,8,9,10,11}

How Somatic Therapy Works in Practice

Somatic therapists are trained to work with the sensations of the body in the same way that talk therapists are trained to work with thoughts or cognitions. I've been treating clients using this technique for two years. Here's a basic overview of how it works.

First, I ask the client to take note of any sensations in their body (tightness, tingling, or nausea, for example). Next, I ask questions to deepen my understanding of the sensation and we pay careful attention to how the sensation shifts in the body. From there, we work with the sensation in different ways to transform it from fear to safety.

Focusing on the body's response to the trauma – instead of the trauma itself – reduces the possibility of re-traumatizing the individual and starts the healing process. Through the body, we have more access to the traumatic residue, which may not be available in memories.

This is a process that needs to be guided by a trained somatic therapist. I consistently remind my clients: We do not process trauma alone. It is important to process trauma in a trusting, therapeutic relationship. We must co-regulate with another person before we can self-regulate.

Finding Acceptance in Both ADHD and Trauma

Shame is a pervasive component of both ADHD and trauma; recognizing this is key to effective treatment. Somatic therapy can help patients to understand that neither is their fault and, eventually, to find acceptance.

A patient who develops a highly-attuned awareness of their body may be able to discern which symptoms are manifesting from a stress response and which symptoms are more rooted in the neurology of ADHD. For example, somatic therapy can help a patient determine whether they are distracted because of a stress trigger or because of something new and interesting in their environment. A therapist can apply traditional ADHD treatment therapies, such as executive functioning skills training, to help a patient who is experiencing the latter.

Somatic therapy is a long-term treatment (lasting a year or more) that requires a licensed mental health practitioner trained in somatic therapy who also has experience treating people with ADHD. Since somatic therapy is a modality used by licensed therapists, most insurance policies that cover traditional talk therapy will cover somatic therapy as well.

5 Ways to Practice Somatic Therapy at Home

Though working with a trained therapist is the best treatment, patients with trauma and ADHD can follow these simple rules to increase awareness of the nervous system.

#1. Note body sensations throughout the day. Noting and amplifying good experiences can be especially helpful when treating both ADHD and trauma, both of which carry a history of negative experiences. Ask the patient to notice a flash of joy or happiness, pause and ask, “What are the sensations of feeling good in my body?” Softness in the shoulders? Heaviness in the legs? Warmth in the belly? There is no right answer. Taking an imaginary “snapshot” of this feeling shows the nervous system how to feel regulated.

#2. Find safety in structure. Structure — knowing consistently what to expect — can foster a sense of safety and decrease chronic stress-related activation or vigilance. Knowing the day will start with a shower and end with teeth brushing, for example, makes us feel safe.

#3. Build a strong foundation. Diet, exercise, and sleep are the foundations of a healthy nervous system function. Healthy habits can be challenging for those with ADHD and trauma, so it makes sense to revisit these foundational areas frequently. If a patient feels lost and overwhelmed, assess foundations, and adjust as needed.

#4. Notice agency. ADHD and trauma are the opposite of control. In somatic therapy, we start with controlling the movement of muscles in the body. Paying attention to the areas of life where there are choices brings awareness to what can be controlled, rather than what feels uncertain.

#5. Communicate with the nervous system to calm it down. One way to quiet activation in the body is the gentle reminder that this is not a survival situation. Patients may send the body an “all clear” signal by:

- Slowing down movement and speech when walking and talking quickly.
- Picking a daily action – such as walking out the door to a car. Use this as a signal to check for muscle tension in the shoulders, back, or jaw. Then, release it, even just a little, in that moment.
- Practicing intuitive movement. When there is a natural pause in the day, ask the body if it wants to move in a certain way. Perhaps the patient feels like shaking out his or her hands or stretching the neck. Asking the nervous system what it needs to feel better – and listening for the answer – is an effective way to communicate with the body and give it what it needs.

It is important to remember that slow is fast, and less is more. There is no quick fix, but as the chronic stress response heals, symptoms will improve.

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ARE ADHD AND TRAUMA CONNECTED?



What's the relationship between ADHD and trauma? Here are the similarities and differences. Everything we go through in life impacts how we function daily. And sometimes, it can be challenging to tell what's causing us to act, think, and feel how we do.

For example, those affected by attention deficit hyperactivity disorder (ADHD) and trauma can present similar symptoms. Learning how to tell the difference between them can help you get the appropriate care and support.

ADHD vs. trauma

ADHD is a mental health condition typically characterized by inattentive, hyperactive, or impulsive behavior.

On the other hand, trauma is a mental, emotional, or physical response to a shocking or distressing event or series of stressful events.

Both have common symptoms, yet they tend to impact every person differently.'

"In considering links between any two psychiatric disorders, it's important to remember that there's no such thing as black and white," says [James M. Greenblatt](#), MD, medical director at [Psychiatry Redefined](#) and author of the [ADHD book](#) "Finally Focused."

Our health is constantly impacted by genetic, environmental, and psychosocial factors, among others, he says. And no two people are exactly alike.

So, although ADHD and trauma can overlap in presentation, their relationship – and our relationships with each of them – is nuanced.



What's the relationship between ADHD and trauma?

“At this time, it’s unclear whether there’s a causal relationship between ADHD and trauma, though there’s growing evidence to suggest this connection,” says Kate Hanselman, a psychiatric mental health nurse practitioner who specializes in working with folks with ADHD at Thriveworks in Stamford, Connecticut, and lives with ADHD herself.

“We’re still discovering [the] causes [of ADHD], but it’s clear that it’s influenced by genetics and in utero and early life exposures to a variety of stress and trauma,” she adds.

For example, she explains that potential bullying from peers over social difficulties resulting from ADHD symptoms increases the risk of:

- abusive behaviors
- substance use
- risky behaviors
- being in potentially traumatic situations

Childhood trauma and ADHD

There seems to be a relationship between childhood and trauma and ADHD symptoms.

A 2017 study suggests that stressful life events, including childhood trauma, can predict ADHD symptoms.

Another 2017 study indicates a significant association between adverse childhood experiences (ACEs) and moderate to severe expression of ADHD.

Hanselman explains that the brain changes from childhood trauma can be linked to ADHD symptoms. But timing plays a key role here – because ADHD is a neurodevelopmental condition, trauma that occurs later in life is unlikely to cause ADHD.

Early childhood trauma can intensify ADHD symptoms, though.

“Depending on the nature of the trauma, this can lead to children and adults with ADHD to withdraw or have a harder time socially, or to have a harder time with work or schoolwork, which can lead to further worsening of existing ADHD-related symptoms,” adds Hanselman.

Is there a link between ADHD and PTSD?

Research suggests a relationship between ADHD and post-traumatic stress disorder (PTSD). Kids with ADHD may be at risk for increased trauma due to their condition as well.

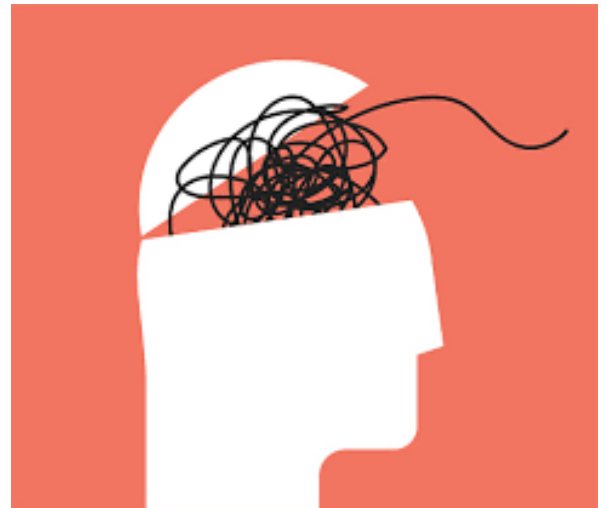
“The child [with ADHD] is often aware that [they’re] ‘different,’ which may exacerbate [their] sense of alienation and erode self-esteem. Worse, [they] may not understand why this is so and become trapped in a cycle of self-blame,” says Greenblatt.

“This can all be intensely [stressful], particularly for young children who can’t properly verbalize their lack of control over symptoms and may not understand why they are ‘different’ at all,” he adds.

A 2013 study shows that the lifetime prevalence of PTSD was much higher among adults with ADHD, compared with those without the condition.

PTSD symptoms can include:

- memory issues
- nightmares
- flashbacks
- irritability
- difficulty concentrating
- sudden bursts of anger
- difficulty with emotional regulation
- increased stress response
- reduced interest in activities
- sleep disturbances
- feelings of shame or guilt



Some of these can present within people with ADHD, too. “Because of this, PTSD can contribute to and worsen underlying symptoms of ADHD,” says Hanselman.

Does trauma make ADHD worse?

The short answer is yes, it can.

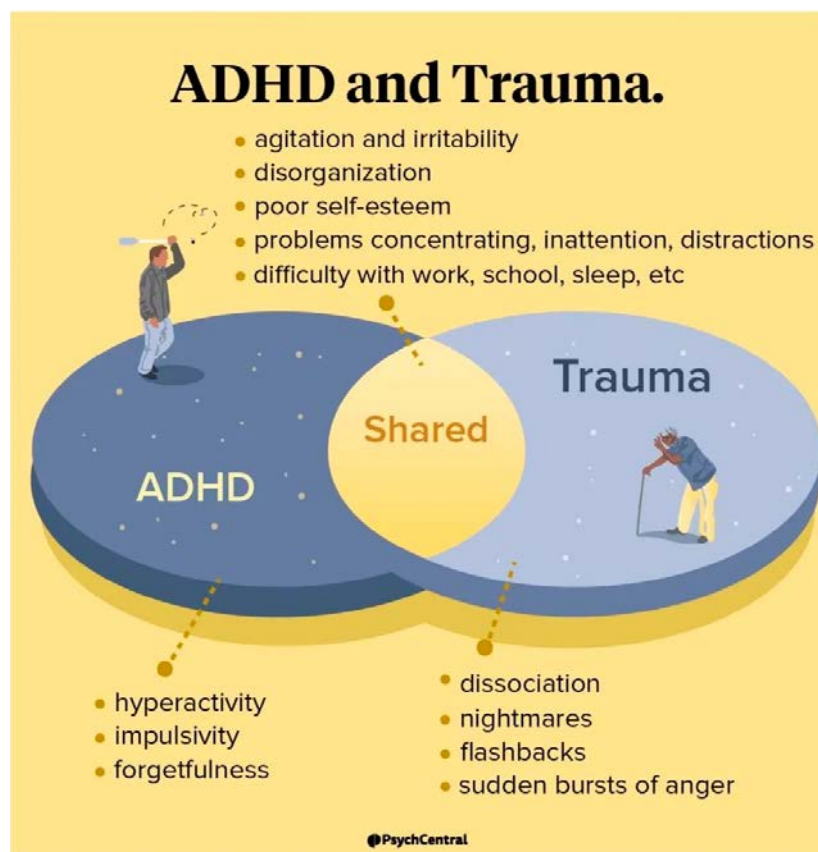
“Any brain that’s already wired for increased difficulty with sustaining attention, regulating behavior, and impulsivity will most certainly have a harder time when under stress or trauma in the present,” says Hanselman.

“Past trauma, especially childhood trauma, has been linked to a possible increased risk for ADHD development and severity of symptoms,” she adds. “Especially with such an overlap of post-trauma symptoms and ADHD symptoms, we can see how easily the effects of trauma would make existing ADHD worse.”

Greenblatt adds that there’s a high potential for either condition to worsen the other.

For example, he says severe trauma can worsen preexisting aggressive or impulsive behaviors in children with hyperactive-impulsive ADHD. It can also lead to further problems with sleep, which people diagnosed with ADHD (or misdiagnosed with ADHD) already experience.

Shared symptoms of ADHD and trauma



“The lasting effects of trauma, especially trauma in childhood, can include inattention, impulsivity, and hyperactivity – the core symptoms of ADHD. So, trauma-related symptoms can be similar to ADHD symptoms, and vice versa,” Hanselman says.

Both experts suggest that trauma and ADHD have the following symptoms in common:

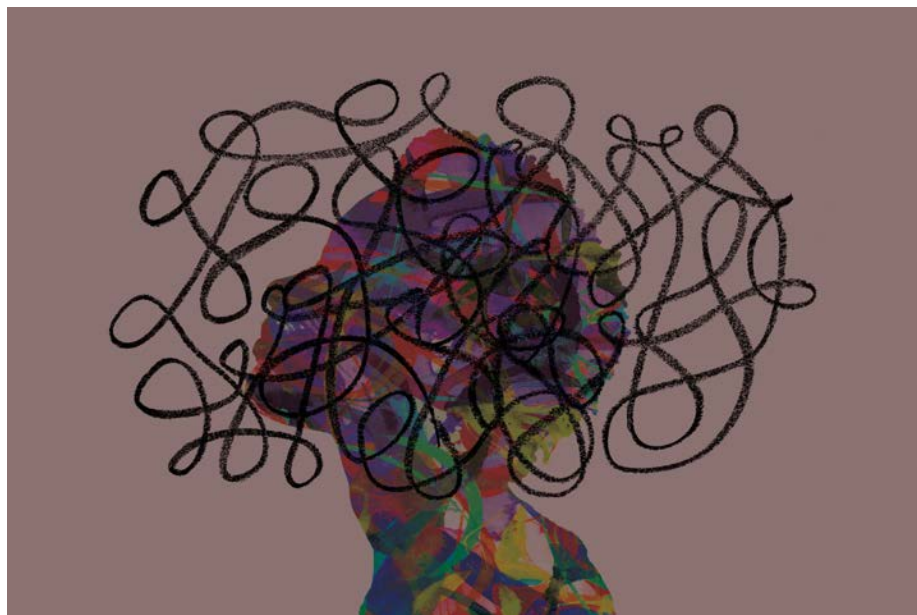
- agitation and irritability
- heightened impulsivity and risk-taking
- disorganization
- poor self-esteem
- inattention
- distractions
- problems concentrating
- difficulty with work, school, sleep, chores, etc.

Meanwhile, symptoms generally unique to ADHD include:

- hyperactivity
- impulsivity
- forgetfulness

On the other hand, symptoms usually unique to trauma are:

- dissociation
- nightmares
- flashbacks
- sudden burst of anger



How to differentiate

If ADHD and trauma share so many symptoms in common, how can you distinguish between them?

Greenblatt notes that it can be difficult based on appearance or behaviors. This is because their presentations can be so similar yet different.

“There’s also tremendous variability in the presentation of both disorders, which can further challenge a diagnosis,” he adds.

Hanselman recommends reaching out for mental health support with a qualified professional if you or a loved one starts to experience concerning signs of either ADHD or trauma.

“Trying to differentiate or manage ADHD or trauma-related signs on your own can lead to delays in care, which can lead to worsening symptoms,” she explains. “There’s effective, safe, and life-improving care available, and it’s now more accessible than ever before. “To prevent the cumulative effects of trauma that unmanaged ADHD symptoms can cause, it’s essential to implement a multifactorial treatment approach that targets the brain-related deficits and disruptions to neurotransmitter pathways that give rise to symptoms,” Greenblatt says.

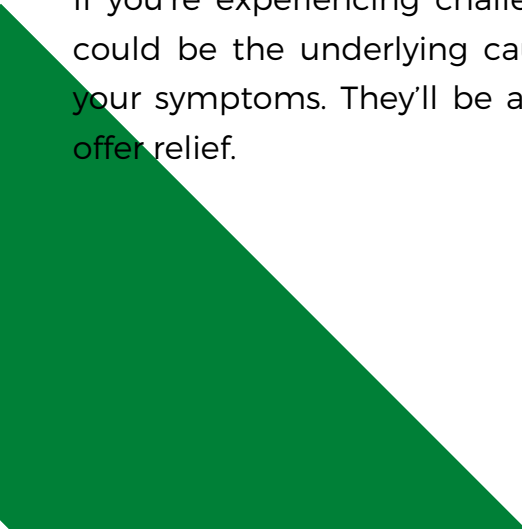
Treatment may include:

- behavioral therapy
- stimulant medication
- trauma-informed care

Next steps

ADHD and trauma have many similarities. But they also have their differences. No matter what you’re experiencing, help is available.

If you’re experiencing challenges navigating your daily life, and you think ADHD or trauma could be the underlying cause, consider speaking with a mental health professional about your symptoms. They’ll be able to provide you with a personalized treatment plan that can offer relief.





Prenatal and Early Life Risk Factors of ADHD: What Research Says — and What Parents Can Do

The causes of ADHD include biological and genetic factors, as well as environmental ones including prenatal and early life exposures. We know that all of these may play a role to varying degrees in the condition's development in children, but there is much left to uncover. Here, read an overview of the evidence, along with steps parents can take to protect their child's health.



Is ADHD caused by birth trauma? Do prenatal complications increase a child's risk for ADHD? What role do exposures during pregnancy and infancy play in the development of ADHD? These are all important – and difficult-to-answer – questions about the causes of ADHD that parents ask frequently.

From lead exposure and maternal stress during pregnancy to low birth weight, the list of prenatal and perinatal risk factors associated with ADHD seems to grow longer and longer with ongoing research. But there is much left to learn. The causal role of many exposures linked to ADHD is unclear; some appear to be artifacts of ADHD's genetic element, while others are truly causal contributors. The other critical factor is that none of the risk factors cause ADHD every time; most children exposed to these risk factors do not develop ADHD.

Thus, it seems increasingly clear that genes and environments work together to shape development of the brain and behavior throughout life, but especially –and most dramatically – in very early life. ADHD, like other complex conditions, doesn't have a single cause. Both nature and nurture influence its development.

Some prenatal and perinatal risk factors for ADHD are unavoidable and inevitable. Mothers grappling with their child's ADHD diagnosis especially may place undue blame on themselves as they fixate on past events that could have contributed to their child's ADHD. But science provides comforting truths: Exposure to risk factors does not guarantee ADHD, and early and effective treatment approaches can often mitigate the effects of previous complications and improve outcomes.

ADHD Risk Factors: What We Know

Prenatal Risk Factors

Teratogens: Alcohol, Smoking, and Other Substances

Teratogens are substances and agents that could harm a developing fetus during pregnancy. Some teratogens have been linked to ADHD, though association should not be mistaken for causality.

Alcohol

Children whose mothers consumed alcohol during pregnancy were at 1.55 times the risk for developing ADHD compared to children whose mothers did not consume alcohol while pregnant, according to a 2015 study of roughly 20,000 parents.¹ Other studies have found mixed evidence on prenatal alcohol exposure and ADHD risk.^{2 3}

Drinking alcohol during pregnancy can cause a group of conditions called fetal alcohol spectrum disorders (FASD), which are associated with some symptoms and features linked to ADHD, including behavioral challenges, inattention, learning disabilities, poor memory, hyperactivity, and impulsivity.⁴

In many cases, FASD is overlooked altogether and even misdiagnosed as ADHD.^{5 6}

Tobacco Use

Maternal prenatal smoking increases risk for ADHD in children by more than one and a half times, according to a 2020 review of 12 large studies.⁷ Other studies have found that paternal smoking before and during pregnancy increases risk for ADHD in offspring.^{1 8 9}

However, while smoking in pregnancy is a major correlate of ADHD, it's probably not a causal factor. Studies that controlled for genetic effects found that the maternal smoking association to ADHD largely disappeared.

Drugs and Other Substances

- Opioids: Children whose mothers used opioids during pregnancy had more than double the risk for ADHD compared to those whose mothers did not use the drug, according to a 2022 study of about 3,000 children.² The same study found that risk for ADHD increases with exposure to multiple substances, including tobacco and cannabis.
- Acetaminophen exposure in the womb may increase a child's risk for ADHD.¹⁰ It's unclear whether there are time periods when the developing brain may be most sensitive to acetaminophen exposure. The FDA urges pregnant parents to consult with a doctor before taking pain medication.

But, as with smoking, we do not yet know if these effects are causal independent of genetic effects.

Maternal Health Issues

Maternal Metabolic Syndrome

Maternal obesity, hypertension, diabetes, and related conditions before and during pregnancy are associated with increased risk for ADHD, autism, and other neurodevelopmental disorders in offspring.^{12 13} While researchers are still investigating the connection, the risk for these effects in isolation appears small, especially considering the prevalence of these conditions at large. Still, they are effects that helps us learn about mechanisms that are possibly tied to ADHD.

Emotional Stress and/or Trauma

Maternal exposure to stress or trauma, if it's high, can influence offspring behavior and temperament. What's more, chronic prenatal stress increases the likelihood that a child will have ADHD or other conditions.

One 2018 study found that mothers who experienced high levels of stress during their pregnancy were more than twice as likely as less-stressed mothers to have a child diagnosed with ADHD or conduct disorder.¹⁴

Birth Trauma and Delivery Complications

Oxygen Deprivation

Insufficient oxygen supply and blood flow in utero and during birth is associated with increased risk for ADHD in later life.

Birth asphyxia is associated with a 26% greater risk of developing ADHD, while neonatal respiratory distress syndrome is associated with a 47% greater risk for ADHD, according to a 2012 study of more than 13,500 children with ADHD.¹⁵

C-Section Delivery

Compared to babies born via vaginal delivery, babies born via cesarean delivery (whether elective or emergency) are at greater risk for ADHD, according to a 2019 review of 61 studies comprising more than 20 million deliveries.¹⁶ The link between the two – including whether C-section delivery plays a causal role in the development of ADHD – remains unknown.

Prematurity and Low Birth Weight

Low birth weight and prematurity do appear to have a significant causal influence on the development of ADHD. Extremely preterm babies and those with very low birth weight are about three times likelier than healthy babies to develop ADHD, according to a 2018 meta-analysis of 12 studies involving 1,787 participants.¹⁷ Studies that controlled for genetics found the association still held.



ADHD Risk Factors: Events and Exposures in Early Life

Lead and Other Pollutants

Research on lead as a developmental neurotoxicant is robust. Its correlation with ADHD is also well established.¹⁸ Even low levels of exposure have an effect on ADHD.

Recent evidence suggests that lead has a causal role in ADHD. In our 2016 study, we looked at the effect of a common gene mutation – HFE C282Y – on the relationship between blood lead levels and ADHD symptoms in children, and found that children with ADHD who had the gene mutation exhibited greater symptoms of hyperactivity and impulsivity than did children with ADHD without the mutation.¹⁹

Because the C282Y gene helps to control the effects of lead in the body, and the mutation was spread randomly in the children, it is difficult to explain these findings unless lead is, in fact, part of the cause of ADHD, not just associated with it. Numerous animal studies also support a link.

As far as other pollutants, early exposure to nitrous dioxide and persistent organic pollutants has also been linked to ADHD, among others.^{20 21}

Breastfeeding and ADHD

Breastfeeding is linked to decreased risk for ADHD in children.²² Mothers of children with ADHD are more likely than mothers of neurotypical children to report shorter breastfeeding duration.²³ What underlies the ADHD-breastfeeding link is unclear, like whether breastfeeding protects the developing brain from ADHD, or if infants who are going to develop ADHD are more difficult to breastfeed and are thus breastfed for a shorter period of time. We used advanced statistical methods to test this in one study, and found that the causality was reversed: child ADHD caused reduced breastfeeding duration.

Head Injuries

Head injuries, especially severe traumatic brain injuries, increase risk for ADHD, according to a 2021 review of 24 studies that included 12,374 children.²⁴

Head injuries and ADHD share a complicated chicken-and-egg relationship, as ADHD itself increases risk for head trauma.²⁵ Children with ADHD are twice or three times as likely to obtain serious head injuries and accidental head injuries through their impulsivity.

Childhood Trauma

Children who experience trauma and who are exposed to adverse childhood experiences (ACES) are at increased risk for ADHD. The inverse is also true: ADHD increases the risk of exposure to trauma.^{26 27}

Trauma is also known to exacerbate symptoms of ADHD. Compared to children without ADHD, children with ADHD who experience trauma are more reactive and sensitive to it, and need additional support.

Beyond a bi-directional relationship, trauma and ADHD share similar symptoms. It takes an experienced clinician to distinguish the conditions and understand if a child is experiencing a trauma effect or showing true signs of ADHD or both.

ADHD Risk Factors: The Bottom Line

Though research links a host of prenatal and early life risk factors to ADHD, it's crucial to understand the following:

1. Few of these risk factors are yet known to be causal.

In most instances, we don't yet know if risk factors have a causal effect or if it's just artificial due to unmeasured correlates (in particular, genetic confounding). A key principle seems to be that the accumulation of multiple risk factors matters most in a child's health. Genetic risk can be seen as one of the risk factors. But even a family history of ADHD doesn't guarantee that a child will develop the condition.

2. Not all ADHD risk factors have equal influence.

Evidence for risk factors vary from “very strong” to “maybe.” Risk factors also tend to add up and occur in clusters, which ultimately makes it difficult to assess a factor’s relationship to ADHD. Some populations, including disadvantaged groups, may also be more vulnerable and sensitive to these risk factors or experience more of them.

3. To date, research has focused almost entirely on ADHD risk factors related to maternal health and pregnancy – but a dramatic shift is underway.

The history of psychiatry has unfortunately seen misguided blaming of mothers. It is important to realize that many of the risks are unavoidable, and that fathers are not off the hook. Paternal support, for one, can be a protective factor in maternal prenatal health and thus fetal health. But we are also learning more about how paternal exposures pre-pregnancy can affect sperm health and thus fetal health.

4. Exposure to a risk factor – even to a causal contributor of ADHD – does not guarantee an ADHD diagnosis down the line.

Most children who are exposed to these risk factors do not develop ADHD. There still has to be some other vulnerability or some other factors combined with these things in order for ADHD to emerge. In all, exposure to risk factors are rarely by themselves the entire explanation.

ADHD Risk Factors: What Parents Can Do

Exposure to ADHD risk factors may become a source of regret and second-guessing for parents. What I say to caregivers in this: Move forward; don’t belabor the past. Ultimately, at today’s level of knowledge, the cause of your child’s ADHD is not entirely known. More practical is to recognize that there is still a lot you can do to move forward positively.

If you are an expectant parent and/or the parent of a child with ADHD, follow these strategies below to minimize exposures, manage (and even reduce) your child's ADHD symptoms, and protect your family's health and wellbeing.

1. Engage in Behavioral Parent Training

ADHD can cause challenging behaviors that may overwhelm parents and lead to a negative parent-child dynamic – in itself a factor that can impact a child's health and wellbeing. That's why behavioral parent training (BPT) is an essential component of any child's ADHD treatment. BPT teaches you how to respond to your child's behaviors without inadvertently making those behaviors worse. Another benefit of BPT? It increases the chances that ADHD medication will work, and can lead to medication working at a lower dose.

2. Focus on Nutrition

Research has uncovered various links between nutrition and ADHD – some of which translate to actionable steps for your family.

- Eat healthy foods during pregnancy. A 2018 study of about 1,240 mother-child pairs found that children whose mothers had a healthy prenatal diet were less likely to exhibit symptoms of hyperactivity over time than were children whose mothers had an unhealthy prenatal diet.²⁸ Limit heavily processed foods and opt for whole, nutrient-dense foods.
- Consider omega-3 supplements (1000 mg EHA/DPA a day). Children with ADHD tend to have lower omega-3 levels compared to children without ADHD, and supplementation modestly improves ADHD symptoms.²⁹ Furthermore, prenatal omega-3 supplementation improved attention development in infants and toddlers in at least one controlled experiment.³⁰
- Try an elimination diet. Five percent to twenty-five percent of children with ADHD may see symptom improvement in response to a diet that eliminates common food allergens (cow-milk protein, soy, wheat, eggs, peanuts, seafood/shellfish) and additives (artificial food dyes and flavors).³¹ An elimination diet may be worthwhile if you suspect a dietary factor at play. But note that dietary changes are often difficult to implement. Your child may object, or the entire family may need to be involved. Adequate nutritional replacement also must be identified. Thus, only attempt this elimination plan in consultation with a behavioral counselor and nutritionist and/or your child's pediatrician.
- Opt for whole, unprocessed foods. Shop the perimeter of the supermarket for fresh, nutrient-dense foods. Avoid added sugars and caffeine, and try to keep your kitchen stocked with only healthy food choices.
- Test for nutritional deficiencies. Children with ADHD are more likely than other children to have low levels of iron, zinc, and vitamin D.^{32 33 34} Supplementation can sometimes help with ADHD if nutrient levels are low. Recent evidence also suggests that specialized multi-nutrient supplements benefit important aspects of ADHD.³⁵

3. Encourage Good Sleep Habits

Behaviorally-related sleep problems — from going to bed to falling and staying asleep — are common among children with ADHD. (True endogenous sleep disorders also occur at above chance levels in ADHD, but still are present only in a minority.³⁶) Insufficient sleep, of course, worsens ADHD symptoms and functioning.

Create a bedtime routine, turn off or take away electronic devices before bed, and aim for your child to get 10 hours of sleep per night (depending on age). Talk to your child's doctor to screen for potential co-occurring sleep disorders, or to get help with your child's sleep problems.

4. Get Your Child Moving

Exercise improves health, mood, and ADHD symptoms.³⁷ Exercise may even reverse some of the biological effects of past traumatic events on the body, as shown in animal studies.³⁸ Children need at least one hour of moderate to vigorous exercise — be it sports, free play, or anything in between — on most days of the week.³⁹

Nutrition, sleep, and exercise are healthy lifestyle factors with the clearest effect on ADHD symptoms. While they usually will not substitute for professional treatment, they may well reduce the stimulant or psychotherapeutic dosage your child needs.

5. Reduce Exposure to Lead and Other Pollutants

A lead test —for your child and for yourself, especially if you are pregnant or planning for it — is worth doing if you live in an area of high lead exposure. However, note that common medical lead tests do not detect the low exposure levels that have now been associated with ADHD in scientific studies. Thus, even if your child does not have detectable exposure, it is prudent to minimize lead exposure.

A healthy diet and sufficient levels of iron and vitamin D can help minimize the effects of lead (because of the way lead is metabolized).

Consider the following steps to address potential pollutant exposures at home and school:

- Purchase a lead-removing water filter certified by an ANSI-accredited body.
- Install HEPA-quality air filters.
- If you live in home built before 1980, prevent and repair loose or chipped paint and do not let your child play in the soil right next to the house if possible.
- Learn about various sources of lead exposure and how to protect your family.

6. Limit Screen Time and Watch for Quality

Though still a new area of research, findings from screen time research are cautionary. In a 2018 study, teens who spent excessive time on social media were more likely to exhibit ADHD symptoms after a two-year follow-up compared to teens who did not use social media as frequently.⁴⁰

“Gaming addiction,” while still controversial, is receiving increased scrutiny. While more work is forthcoming, it remains possible that children with ADHD may be more susceptible to problematic video game play due to self-regulation challenges and the high-reward nature of gaming itself. Studies also link exposure to violent content with increased aggression in vulnerable children.⁴¹

7. Practice Self-Care

- Manage stress and reduce stressors in your life. The more stressed out you are, the more stressed out your child will be, and the more you’ll get into a negative cycle. Social support and self-compassion are among the key elements for managing stress.
- Recognize your own history of stress and trauma if present, and seek counseling and treatment if needed. Tell your doctor (and your child’s doctor) about your family’s experience with trauma, if any.
- Eat a healthy diet, practice good sleep hygiene, and get exercise daily.
- If you have ADHD, depression, or other mental health challenge yourself, stick to your treatment plan or talk to your doctor to see if an adjustment is necessary.

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WOMEN'S
HISTORY
MONTH

This month we highlight women we recognize as those who have empowered, changed, inspired and more in our community.



Henrietta Lacks

In 1951, Henrietta Lacks made one of the greatest medical contributions after her cells were taken from a cervical-cancer biopsy. However, it was taken without her permission. “HeLa” cells became the first immortal human cell line to reproduce infinitely in a lab.



Marsha P. Johnson

Was an outspoken transgender rights activist and is reported to be one of the central figures of the historic Stonewall uprising of 1969.



Wangari Maathai

Wangari Maathai was the first Black African woman to receive a Nobel Peace Prize for her efforts in environmental conservation. In the 1970s, she founded the Green Belt Movement, an environmental non-governmental organization focused on environmental conservation and women’s rights.

This month we highlight women we recognize as those who have empowered, changed, inspired and more in our community.

Ketanji Brown Jackson



In April 2022, Ketanji Brown Jackson made history as the first Black woman appointed to the U.S. Supreme Court. As a young woman, she loved the law and set her sights on Harvard University. After being discouraged by a high school guidance counselor, Jackson not only graduated magna cum laude from the university, but went on to attend Harvard Law School and served as editor of the "Harvard Law Review."

Althea Gibson



Althea Gibson overcame racial bias to become the first African-American tennis player to win a Grand Slam tournament – the French Championships in 1956. She went on to win four more singles Grand Slams and six doubles titles.

Angela Davis



Was a major activist in the late 1960s and early '70s. Profoundly affected by her childhood in the segregated city of Birmingham, Ala., she joined the Communist Party and became an affiliate of the Black Panthers as a young woman, and ran as the Communist vice-presidential candidate in 1980 and 1984. She was arrested, tried, and acquitted for her role in a Black Panther courtroom shootout. She went on to have a distinguished academic career at institutions including Pomona College, Rutgers, and Vassar, and has remained politically active.

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National Domestic
Violence Hotline:
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Runaway and
Homeless Teen
Hotline Help:
1-800-246-4646



Coalition for the
Homeless:
212-776-2000

Drug and Alcohol
Hotline:
800-622-2255

Food and Hunger
Hotline:
866-888-8777

Homeless Services
Hotline:
212-533-5151

Rape Crisis Hotline:
212-227-3000

National Child
Abuse Hotline:
1-800-422-4453

National Teen
Dating Abuse
Helpline: 1-866-
331-9474

Crisis Lifeline for
LGBTQ Youth:
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Boys Town National
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Behavior Management Consultants believes that, “No Child is Born Bad”. Our mission is to educate, mentor, and assist parents, caregivers, and professionals to cope with, socialize, and identify values important to today’s youth.

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- Residential Treatment Centers (RTCs)
- Public Schools
- Community Based Organizations (CBOs)

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Quote of the Month

“He who is not courageous enough to take risks will accomplish nothing in life.”

—Muhammad Ali



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