

ADHD and Autism Spectrum Disorder

AUTISM SPECTRUM DISORDER, or ASD, includes what used to be called Autistic Disorder, Asperger syndrome, or Pervasive Developmental Disorder – Not Otherwise Specified, all of which affect a person’s social and emotional skills and nonverbal communication. ASD has many similarities to ADHD, but there are also differences between the two.

Can a person be diagnosed with ADHD and ASD?

More than half of all individuals who have been diagnosed with ASD also have signs of ADHD. In fact, ADHD is the most common coexisting condition in children with ASD. On the flip side, up to a quarter of children with ADHD have low-level signs of ASD, which might include having difficulty with social skills or being very sensitive to clothing textures, for example.

Why do ADHD and ASD coexist so often and what are the similarities between them?

Both ADHD and ASD are neurodevelopmental disorders (brain development has been affected in some way). That means both conditions/disorders affect the central nervous system, which is responsible for movement, language, memory, and social and focusing skills. A number of scientific studies have shown that the two conditions often coexist, but researchers have not yet figured out why they do.

With ADHD or ASD, brain development has been affected in some way. Most importantly, that includes the brain’s executive functioning, which is responsible for decision making, impulse control, time management, focus, and organization skills. For many children, social skills are also affected. Both ADHD and ASD are more common in boys.

Although adults can have both ADHD and ASD, the combination is not as common as it is in children. While ASD is considered a lifelong disorder, long-term studies have shown that in one-third to two-thirds of children with ADHD, symptoms last into adulthood.

What are the differences between ADHD and ASD?

Many children are first diagnosed with ADHD around the time they start preschool or kindergarten because their behavior contrasts with that of their classmates. ADHD can cause children to be restless all the time, act impulsively, and have a hard time paying attention. But some children with ADHD have different signs—focusing all their attention on one toy, for instance, and not wanting to play with anything else.



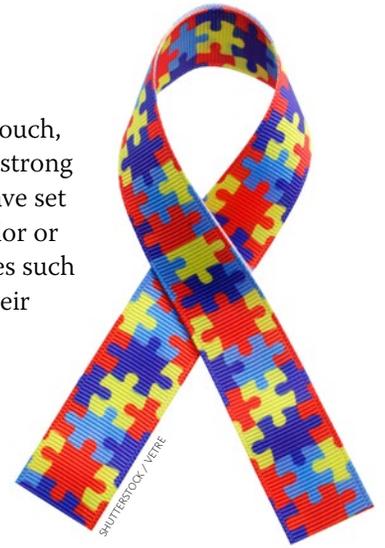
For some children with ASD, the signs are noticeable before they reach their second birthday. For others, signs of ASD may not be clear until they are school-aged and their social behaviors are clearly different from their classmates'. Children with ASD often avoid eye contact and don't seem interested in playing or engaging with others. Their ability to speak may develop slowly or not at all. They may be preoccupied with sameness in textures of food or in making repetitive movements, especially with their hands and fingers.

ADHD- and ASD-specific behaviors

Often, children with ADHD have difficulty focusing on one activity or task. When they are engaged in their daily activities they may be easily distracted. It is challenging for children with ADHD to complete one task before jumping to another, and they are often physically unable to sit still. But some children with ADHD may be so interested in a topic or activity that they fixate on it, or hyperfocus. Although focusing on one thing can be positive, it may mean that children have difficulty moving their attention to other activities when they are asked to do so.

Children with ASD are most likely to be overfocused, unable to shift their attention to the next task. They are often inflexible when it comes to their routines, with low tolerance for change. That may mean taking the same route and eating the same things every day. Many are highly sensitive

or insensitive to light, noise, touch, pain, smell, or taste or have a strong interest in them. They may have set food preferences based on color or texture and may make gestures such as repeated hand flapping. Their intense focus means people with ASD are often able to remember detailed facts for a long time and may be particularly good at math, science, art, and music.



Treatment overview

The best medical provider for someone who has been diagnosed with both ADHD and ASD is a doctor who has experience treating both conditions.

Treatment for ADHD usually includes medication. On the other hand, because the medication options for ASD are still limited, children with ASD may respond better to non-medication alternatives. Those might include behavior therapy to help manage symptoms and skills training to help cope with daily life. For a child with ASD, paying attention to diet is essential, because sensory-based food restriction can result in nutritional gaps. For someone with ADHD, stimulant medications can cause a loss of appetite.



Medication

While the symptoms of ADHD generally respond well to the most commonly prescribed medications, ASD symptoms are less likely to do so. Symptoms of ASD that often overlap with ADHD, such as hyperactivity, impulsiveness, and inattention, may respond to the medications used to treat ADHD, if not as well. Medications to treat ASD are now being developed, and irritability, aggression, and self-injury that are related to ASD usually respond to antipsychotic medications.

Medication is frequently part of the treatment plan for children with ADHD because it helps reduce some of the major

symptoms, including hyperactivity and impulsivity. The most commonly prescribed medications are methylphenidate (Ritalin, Concerta, Metadate, Quillivant), amphetamine (Adderall, Dexedrine, Vyvanse, Dyanavel), atomoxetine (Strattera), and guanfacine (Intuniv, Tenex). However, when they are used to treat patients with both ADHD and ASD, the stimulants—methylphenidate and amphetamine—seem less effective and cause more side effects, including social withdrawal, depression, and irritability, than when they are used to treat ADHD alone. 🧠



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For more information

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For further information, please contact National Resource Center on ADHD: A Program of CHADD

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