

We may all occasionally have difficulty sitting still, paying attention, or controlling impulsive behavior. But for some children and adults, the problem is so pervasive and persistent that it interferes with their daily lives at home, at school, at work, and in social settings.

**Attention-deficit/hyperactivity disorder (ADHD)** is a neurobiological disorder. It is characterized by developmentally inappropriate impulsivity, inattention, and in some cases, hyperactivity. Although individuals with ADHD can be very successful in life, without appropriate identification and treatment, ADHD can have serious consequences. These consequences may include school failure, depression, conduct disorder, failed relationships, and substance abuse. Early identification and treatment are extremely important.

Until recent years, it was believed that children outgrew ADHD in adolescence. This is because hyperactivity often diminishes during the teen years. However, it is now known that many symptoms continue into adulthood. If the disorder goes undiagnosed or untreated during adulthood, individuals may have trouble at work and in relationships, as well as emotional difficulties such as anxiety and depression.

Research has demonstrated that ADHD has a very strong neurobiological basis. Although precise causes have not yet been identified, there is little question that heredity makes the largest contribution to the expression of the disorder in the population. In instances where heredity does not seem to be a factor, difficulties during pregnancy, prenatal exposure to alcohol and tobacco, premature delivery, significantly low birth weight, excessively high body lead levels, and postnatal injury to the prefrontal regions of the brain have all been found to contribute to the risk for ADHD to varying degrees.

## **What are the symptoms of ADHD?**

ADHD symptoms usually arise in early childhood. Current diagnostic criteria indicate that the disorder is marked by behaviors that are long lasting and evident for at least six months, with onset before age seven. There are three primary subtypes, each associated with different symptoms.

### **ADHD - Primarily Inattentive Type:**

- fails to give close attention to details or makes careless mistakes
- has difficulty sustaining attention
- does not appear to listen
- struggles to follow through on instructions
- has difficulty with organization
- avoids or dislikes tasks requiring sustained mental effort

- easily distracted
- forgetful in daily activities

### **ADHD - Primarily Hyperactive/Impulsive Type:**

- has difficulty remaining seated
- runs around or climbs excessively
- has difficulty engaging in activities quietly
- acts as if driven by a motor
- talks excessively
- blurts out answers before questions have been completed
- has difficulty waiting or taking turns
- interrupts or intrudes upon others
- fidgets with hands or feet or squirms in chair

### **ADHD - Combined Type:**

- Meets both inattentive and hyperactive/impulsive criteria.

Because everyone shows signs of these behaviors at one time or another, the guidelines for determining whether a person has ADHD are very specific. In children, the symptoms must be more frequent or severe than in other children of the same age. In adults, the symptoms must be present since childhood and affect one's ability to function in daily life. These behaviors must create significant difficulty in at least two areas of life, such as home, social settings, school, or work.