

## WHAT WE KNOW

# AD/HD and Teens: Information for Parents

**“S**houldn’t my teen have outgrown this by now!?!”

You, along with many other parents, may be wondering why your child hasn’t outgrown his or her difficulties sitting still, thinking of consequences before acting, resisting distractions, organizing daily activities,

and managing time wisely. In contrast to what was previously thought, today’s research has shown that the majority of children do not outgrow AD/HD when they reach adolescence.<sup>1</sup>

### AD/HD IN ADOLESCENCE

**Symptoms:** The core symptoms required for a diagnosis of AD/HD—inattention, hyperactivity, and impulsivity—remain the same during adolescence as they were earlier in childhood, but the pattern of symptoms and difficulties may change somewhat. In adolescence, some symptoms of AD/HD, particularly those related to hyperactivity, can become more subtle. However, the difficulties that teens experience as a result of AD/HD symptoms, such as poor school performance, may intensify due to increased demands and expectations for independent functioning.<sup>2</sup>

Some of the more pronounced symptoms in teens with AD/HD are related to deficits in “executive functioning.” Executive functioning refers to the functions within the brain that “activate, organize, integrate, and manage other functions.”<sup>3</sup> Stated differently, executive function allows individuals to foresee longer-term consequences for actions, plan accordingly, evaluate progress, and shift plans

as necessary. In addition to difficulties with executive functioning, individuals with AD/HD may also exhibit lower frustration tolerance, exhibit emotional responses that are in excess of what is expected, or appear more emotionally immature than same-aged peers.<sup>4</sup>

## DIAGNOSING AD/HD IN ADOLESCENCE

Some teens with AD/HD were not diagnosed in childhood and may begin to struggle more as demands increase in adolescence. You or your teen's teachers may suspect that AD/HD symptoms are contributing to these struggles. For teens not diagnosed in childhood, obtaining a diagnosis of AD/HD in adolescence can be complicated for several reasons.<sup>5,6</sup> First, to qualify for a diagnosis of AD/HD, symptoms must be present in some way prior to age seven; however, recalling symptoms that were present in the past is often difficult. Second, many of the symptoms listed in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) diagnostic criteria are primarily written for younger

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children (e.g. “runs about or climbs excessively”) and may not be applicable to teens. Third, obtaining reliable reports of teens' symptoms from external observers, such as parents or teachers, is more difficult. This is because adolescents usually have several different teachers, each of whom sees them for a small portion of the day. Similarly, you likely have less direct contact with your teen during the teenage years than you did during their younger childhood. Fourth, as mentioned above, some of the striking symptoms of AD/HD, such as extreme hyperactivity, may be more subtle in teens than in younger children. Finally, the presence of other disorders may complicate the diagnosis of AD/HD. If you suspect that your teen may have undiagnosed AD/

HD, it is important to seek a comprehensive evaluation that includes a careful history, clinical assessment of academic, social, and emotional functioning, and reports from you, teachers, other involved adults (such as coaches) and your teen. This evaluation should also include a physical examination to rule out other causes of observed symptoms. If you would like to have your teen assessed for AD/HD, see a psychologist, psychiatrist, or other clinician with expertise in AD/HD.

## CAUSES OF AD/HD

Research has clearly shown that AD/HD is highly genetic, and the majority of cases of AD/HD have a genetic component. AD/HD is a brain-based disorder, and the symptoms shown in AD/HD are linked to many specific brain areas.<sup>7</sup> Other causal factors, such as low birth weight, prenatal maternal smoking, or other prenatal complications, also contribute to some cases of AD/HD. Patterns of parenting and family interaction may help reduce the impact of the symptoms of AD/HD or may make them worse; however, parenting styles do not cause AD/HD.

## CO-OCCURRING CONDITIONS IN THE TEEN YEARS

It is common for other conditions to occur along with AD/HD.<sup>8,9</sup> These conditions may have been present since childhood, or may emerge with the additional stress of adolescence. In fact, up to 60% of children and teens with AD/HD have been found to have at least one additional disorder.<sup>10,11</sup> These disorders can make parenting more challenging, and many parents find professional assistance helpful in providing support, resources, and additional parenting strategies for their teens.

- Some of the most common conditions experienced by teens with AD/HD are difficulties with disruptive behavior, including Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). ODD is characterized by a pattern of excessive noncompliant and defiant behavior and refusal to comply with requests and rules. CD is a more severe form of noncompliant and defiant behavior that is also associated with difficulty maintaining relationships and causing harm and destruction to people and animals. Research has shown that teenagers with AD/HD are 10 times more likely to experience disruptive

behavior disorders.<sup>12</sup> Other research has estimated that anywhere between 25 – 75% of teens with AD/HD have one of these disruptive behavior disorders.

- Mood disorders, including depression and dysthymia (a type of negative mood similar to depression but longer in duration), can also be prevalent in teens with AD/HD. Research has estimated that between 20% – 30% of teens with AD/HD have a co-existing mood disorder. Bipolar disorder is another type of mood disorder sometimes discussed as co-morbid with AD/HD. However, diagnosing bipolar disorder in teens with AD/HD is controversial<sup>13</sup> and a diagnosis of AD/HD does not appear to increase the risk for bipolar disorder.<sup>14</sup>
- Anxiety disorders may be present in as many as 10 – 40% of teens with AD/HD. Anxiety disorders are characterized by excessive worry and difficulty controlling worries. Individuals suffering from anxiety may also experience physical symptoms including headaches, upset stomach, and rapid heartbeat. They can also experience “anxiety attacks” and begin to avoid anxiety-provoking activities.
- Substance use and abuse is a significant concern of many parents of teens. Indeed, risk for substance use among children with ADHD ranges from 12 – 24%. Use of medication to treat AD/HD is not associated with increased substance use. In fact, use of medication to treat AD/HD may protect adolescents from developing substance abuse disorders later in life.<sup>15</sup> The strongest predictor of substance use among teens with AD/HD is an additional diagnosis of conduct disorder. Symptoms of substance use in teens may include: smelling of alcohol or smoke, changes in eyes or face (i.e., bloodshot eyes or flushed face), mood changes, deceitful or secretive behavior, changes in motivation or decreased academic performance, and/or changes in peer group.
- Learning and communication problems can be significant and research has indicated that learning disorders may be present in as many as 1/3 of youth with AD/HD.<sup>16</sup> The demands of middle school and high school place additional stress on teens and parents should remain aware of their teen’s academic performance and carefully monitor any changes or declines in performance. Communication disorders include not only difficulty with speech production (such as stuttering), but also difficulty with understanding language and the ability to express one’s self clearly. When parents are concerned about

their teen’s communication, they should express their concerns to the teen’s school and/or consult a speech/language pathologist for an evaluation.

- Sleep disturbance is also common in teens with AD/HD. Changes in sleep cycles are normal for all teens as youth begin to stay up later at night and consequently desire to sleep later in the morning. Teens also require more sleep overall. In youth with AD/HD, sleep disturbance may be even more pronounced and is not necessarily a side effect of medications. Given this risk, sleep should be carefully assessed prior to starting medication to determine pre-existing sleep disturbance as separate from medication side effects.<sup>17</sup>

At this time, it is not possible to predict which teens will experience these additional conditions. It is likely that genetics play a role. The additional stresses experienced by teens with AD/HD, such as social criticism or internal frustration, may also make teens more vulnerable to these difficulties. For more information on these co-occurring conditions, please see *What We Know #5: AD/HD and Co-existing Conditions*. What should you do if you suspect that your teen may suffer from any of these additional conditions? If you would like to have your teen assessed, see a psychologist, psychiatrist, or other clinician with expertise in AD/HD.

## AD/HD IN THE TEEN YEARS

What does it feel like to have AD/HD? Teens with AD/HD may experience stigma or embarrassment related to their diagnosis. They may also wish to deny that they have AD/HD. Teens that have AD/HD may feel different their peers, and they may wish to believe that their symptoms have faded or disappeared with age. It is important for parents of teens to normalize their AD/HD. Explain to your teen that having AD/HD is not due to any mistake he or she has made and is not a punishment. Liken AD/HD to other medical conditions, such as asthma or poor eyesight. Explain that it is not the teen’s fault that he or she has the problem, but that treatment will be essential to avoid letting it limit his or her success.

Teens with AD/HD may also have concerns related to their self-perception and be vulnerable to poorer self-esteem than their peers. A sample of teens with ADHD and learning disabilities reported feeling severely stressed when going to school and sitting in class, feeling

tired, frequent quarreling with close friends, feeling different from other classmates, having low self-esteem, and feeling that their parents didn't understand them.<sup>18</sup> Engaging teens in activities which they enjoy and where they feel successful can be powerful ways to address and reverse these concerns. When teens feel successful and confident about themselves in one aspect of their life or abilities, these feelings can often generalize to other areas of functioning as well.

## AD/HD AFFECTS...

- **Academic Performance:** High school is characterized by a more frenetic pace, more demands to juggle, and less supervision. Academically, the workload and difficulty of the material increases, and long-term projects rather than daily homework assignments are the norm. These factors all present challenges to the teen with AD/HD. Adolescents with AD/HD may benefit from assistance with note-taking, study skills, and organization/time management. It is important to help provide teens with the skills necessary so that they can shift from relying on parents or teachers to structure their time and schoolwork schedule to relying on their own abilities. If your teen has a diagnosis of AD/HD and AD/HD symptoms impair academic functioning, he or she may qualify for classroom accommodations. Accommodations can include extra time on tests, taking tests in a separate location where distractions are minimized, or additional organizational support. Inquire with school personnel for more information if you feel that your teen may qualify for and benefit from these accommodations. For more information on your child's educational rights, please see *What We Know #4: Educational Rights for Children with AD/HD*.
- **Social Functioning:** Many children with AD/HD exhibit difficulties in peer interaction due to impulsivity, hyperactivity, and aggression. Younger children with AD/HD may be intrusive in social interactions, louder than their peers, and more disruptive. Peer problems and peer rejection experienced during childhood can continue into adolescence. In addition, a lack of positive peer relationships in earlier years can limit opportunities to practice and refine social skills, thus making existing deficits worse. Finally, the importance of peer relationships increases during adolescence. Therefore, difficulties in establishing and

maintaining relationships can become increasingly disruptive to functioning. Teens with AD/HD are at risk for associating with maladaptive peers or for experiencing peer rejection. Providing your teen with opportunities to participate in structured social activities, such as sports, clubs, or youth groups can help provide positive experiences to offset other, potentially negative, interactions.

- **Home Functioning:** On average, households of adolescents with AD/HD are characterized by more parent-teen conflict.<sup>19</sup> Parenting a child with AD/HD is stressful. Parenthood requires that you place certain demands on your child (e.g. completing homework, participating in chores, returning home before curfew). Teens with AD/HD have more difficulty complying with requests and need more reminders and supervision. This can be frustrating for both you and your teen, and may lead to a cycle of negative interaction. When you repeatedly place demands on your teen with which he or she does not comply (due to inattention, lack of interest, or lack of ability), there is often an escalation of negativity. In such a cycle, you may find yourself lecturing, yelling, or punishing your teen who then responds with anger, additional lack of compliance, or other negative behaviors. As this occurs repeatedly, more minor demands and infractions on rules can trigger the escalation of negativity. An additional source of conflict in the home is that teens with AD/HD often require more supervision and help with organization than others their age, at a developmental stage in which they desire additional freedom and independence. **What can be done to interrupt this cycle?** Clear communication is always important, including explicitly stating rules and expectations and establishing consistent rewards and consequences. If family conflict is exacting a large toll on your family, consider seeking professional help from a qualified mental health professional.

## TREATMENT OF AD/HD

Unfortunately, no cure currently exists for AD/HD and treatment focuses on symptom management. Although the symptoms of AD/HD may change with age, teens with AD/HD still require treatment to target these symptoms and may require treatment into adulthood.<sup>20</sup>

Education is a necessary component to any treatment and provides teens and families with the tools to understand

their disorder and treatment. It is likely that your family received this education when your child was first diagnosed with AD/HD. This education may have been focused directly toward you as the parent, particularly if your child was much younger at the time. As your teen's ability to understand his or her diagnosis and responsibility for treatment increases, it is imperative that this education occur again and be targeted directly toward your teen. Education should also address possible negative attitudes towards AD/HD and treatment. However, education alone is not a sufficient treatment.

It is a myth that medication becomes less effective in the teen years. In fact, medications for AD/HD should be as effective, but patterns of co-occurring conditions may require changes to the treatment regimen.<sup>21</sup> Additionally, many parents and teens may consider the change to long acting medications to provide better symptom management throughout the day as many teens have activities after the school day has ended and into the evening hours. Another myth is that medication use may increase the risk of substance use. In fact, as mentioned above, medications reduce the risk of substance use for teens with AD/HD.<sup>22</sup> A thorough discussion of these medications is beyond the scope of this handout, but please refer to *What We Know #3: Managing Medication for Children and Adolescents with AD/HD* for more information.

Behavioral intervention is another common treatment approach for teens with AD/HD. Proven psychosocial treatments include parent-teen training in problem-solving and communication skills, parent training in behavioral management methods, and teacher training in classroom management.<sup>23</sup> Please see *What We Know #7: Psychosocial Treatment for Children and Adolescents with AD/HD* for more information. Little or no research currently exists to support the use of dietary treatments, traditional psychotherapy, play therapy, cognitive behavioral therapy, or social skills training. However, these interventions may be effective in treating co-occurring conditions if present. You can refer to *What We Know #6: Complementary and Alternative Treatments* for more information.

The most common and effective treatment for teens with AD/HD combines medication and psychosocial treatment approaches. This is sometimes referred to as multi-modal treatment.

## PARENTING THE TEEN WITH AD/HD

Teens with AD/HD are facing the same issues that prove challenging for their peers: development of identity, establishment of independent functioning, understanding emerging sexuality, making choices regarding drugs and alcohol, and setting goals for their futures. However, teens with AD/HD may also face some unique difficulties in successfully accomplishing these developmental tasks. Given their difficulties with executive functioning, teens with AD/HD may require more support and monitoring from parents than teens without AD/HD. If your teen has been diagnosed since childhood, you have already likely learned ways to maximize his or her success. However, the challenges teens with AD/HD present to parents are different than those presented by younger children. Below are some areas that may be unique to adolescents.

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### **“Use of medication to treat AD/HD is not associated with increased substance use.”**

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- **Behavior management:** All children seek additional freedom as they enter adolescence. Be clear with your expectations for responsible behavior, reward appropriate behavior with additional privileges, and enforce consequences for inappropriate behaviors to help your teen learn from his or her mistakes and successes. If you are experiencing difficulty with managing your teen's behaviors, consider seeking additional help from a qualified mental health professional.
- **Driving:** Inattention and impulsivity can lead to difficulties with driving. Drivers with AD/HD have more tickets, are involved in more accidents, make more impulsive errors, and have slower and more variable reaction times.<sup>24</sup> The use of stimulant medications has been found to have positive effects on driving performance.<sup>25</sup> Talk to your teen about safe driving habits, such as using a seat belt, observing the speed limit and other “rules of the road,” and

eliminating distractions such as use of mobile phones and eating while driving. Consider restricting the number of individuals that can be in the car while your teen is driving.

- **Adherence to medication regimen:** Nearly half of children do not take AD/HD medications as directed, for a multitude of reasons,<sup>26</sup> and the use of AD/HD medications decreases over the teenage years.<sup>27</sup> Parent and teens often disagree on the degree of impairment that results from adolescent's AD/HD symptoms.<sup>28</sup> In addition, adolescents may have negative attitudes toward medication use. If your teen expresses a desire to discontinue his or her use of medications, it may be helpful to discuss this with his or her physician and consider a trial period without medication under the physician's supervision. During this period, you can work with your teen to specify goals and develop a plan that includes tutors or behavioral interventions to achieve those goals. Also, specify with your teen what indicators might illustrate the need for resumption of medication. These could include declining grades or increases in conflict at home and with peers. Set a date and time to evaluate progress and re-evaluate the decision to discontinue medication.

- **Medication diversion:** Studies show the diversion of medications, or use or abuse of AD/HD medicines among peers for whom these medications are not prescribed, is an increasing problem.<sup>29</sup> Teens may divert their medications either as a favor to friends or for financial gain. Reasons for non-prescription use of psychostimulants may either be academic or recreational.<sup>30</sup> It is recommended that you talk to your child openly and honestly about AD/HD and its treatment. Inform teens that selling prescription medications in this way and the use of such medications by individuals for whom they were not prescribed is illegal and could have serious legal consequences. In addition, AD/HD medications are safe and effective when taken as directed, but can be dangerous if used without medical supervision. It is important to talk to your child about peer pressure so that he or she will be prepared to respond appropriately if asked to divert medications.

- **Boosting your teen's confidence:** Living with AD/HD can be challenging for you and for your teen. Don't forget to emphasize your love and support for your teen. Communicate that you are there to help him or her work through difficulties and that

you believe that he or she can be successful. Try to help your teen identify his or her strengths and find opportunities for him or her to experience success.

- **Disclosing the diagnosis of AD/HD:** When your child was younger, it is likely that you made decisions regarding when and with whom your child's diagnosis of AD/HD would be shared. As your child matures, you may find that your feelings regarding disclosure differ from those of your teen. A frank conversation with your teen on the potential risks and benefits of disclosure may help clarify this issue for both of you.

## YOUR TEEN'S FUTURE

Teens with AD/HD are at risk for potentially serious problems as they transition into adulthood. First, as many as two-thirds of teens with AD/HD continue to experience significant symptoms of AD/HD in adulthood. In addition, as they become adults, adolescents with AD/HD are at higher risk for lower educational attainment, greater job difficulties, and greater social problems; have a higher likelihood of acquiring sexually transmitted diseases; and are more likely to become parents at earlier ages compared to their counterparts without the disorder.<sup>31</sup> However, *these are only risks, they are not guarantees*. Many teens with AD/HD go on to become successful, productive adults. Continued awareness and treatment is crucial in helping your teen avoid these risks and fulfill his or her potential.

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*The information provided in this sheet was supported by Grant/Cooperative Agreement Number 1U84DD001049-01 from the Centers for Disease Control and Prevention (CDC). The contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC. This fact sheet was approved by CHADD's Professional Advisory Board in 2008.*

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**National Resource Center on AD/HD  
Children and Adults with  
Attention-Deficit/Hyperactivity Disorder**

4601 Presidents Drive, Suite 300

Lanham, MD 20706

1-800-233-4050

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