CARE FOR KIDS

Early & Periodic Screening, Diagnosis & Treatment

Volume 17 • Number 2 • Spring 2010

Diagnosis of Attention-Deficit/Hyperactivity Disorder in the Early Elementary Years

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Attention-Deficit/Hyperactivity Disorder (ADHD) is a common disorder of school-age children, with prevalence estimates ranging from 3 to 7 percent. Boys are more likely to be diagnosed with ADHD: At the University of Iowa Children's Hospital Pediatric Psychology Clinic there is a ratio of three boys diagnosed for each girl. In child psychiatry settings the ratio may be as high as nine boys to one girl.

The three symptom dimensions of the diagnosis of ADHD include inattention, overactivity, and impulsivity of greater than six months duration that is outside the normal limits for age and developmental level. (The six months duration is to exclude disruptions caused by adjustment disorders, family disruption, etc.) Diagnosis of ADHD in the 6- to 9-year-old child can be complicated by a high rate of comorbid learning and behavior disorders. An appointment with the child's primary care physician may be the first time a professional outside the sphere of the child's daily life raises with parents the question of ADHD.

Classroom teachers often notice behavioral issues in children and it is helpful prior to a physician referral to have information about these observations. In the 6- to 9-year-old age group, teachers may identify problems with sitting still in the classroom, completing

class work, and/or impulsive behavior in the classroom or on the playground. The teacher discusses these observations with parents and additional evaluation may be conducted at school, including classroom observations of the attention

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Diagnosis of ADHD in the Early Elementary Years
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of the child and a comparison peer. The teacher may complete a behavior checklist and ask the parent to do the same, rating the child's behavior at home. If not already available, a physician may ask that this information be collected before proceeding with a diagnosis.

Due to the high rate of comorbid difficulties, it also is helpful to obtain information on the child's academic achievement, any educational supports being provided (e.g., Title I reading, Reading Recovery, learning disabilities resource support), and other behavior concerns. It also is helpful if the behavior checklists completed can be compared to norms for the child's age or grade.

During an office exam, unfortunately, it is the exception rather than the rule that the child will exhibit any of the behaviors described above. Children with ADHD do best in novel settings; during brief visits; with self-paced tasks; and in situations that provide frequent feedback. This may be the reason these children often have a very long attention span for videogames. It may also be the reason that teachers often are the first to identify possible ADHD symptoms: they work with children in a setting that is more routine than novel, with tasks paced by the teacher. Also, in the general education classroom, children with ADHD often do not get feedback on their performance as often as needed.

The diagnostic criteria require that the ADHD symptoms be manifest in more than one setting; however, parents may not find symptoms to be as problematic because a child can generally pace his or her own activities at home. It is often helpful to ask parents about homework completion or how long the child can maintain attention to daily reading activities.

For some children, there are physical factors that may exacerbate ADHD symptoms. Children who engage in excessive screen time or sleep poorly (due to having a television on while going to sleep, for example, or who snore due to enlarged tonsils) may benefit from environmental modifications or medical intervention. Children with little routine in their daily environment may benefit from increased structure and organization.

Once the physician has made the diagnosis of ADHD, treatment may be initiated. The child would qualify for a 504 Plan in the general education classroom (i.e., a document agreed upon by school staff and parents to provide accommodations in the regular classroom), which might include preferential seating near the teacher, a positive behavior system, redirection to task, and/or reminders to take home materials needed for homework. Medication treatment also may be considered as an option.

If ADHD symptoms remain problematic after implementing classroom and home modifications and initiating medication treatment, it may be time to consider a referral to a child psychologist for assessment of possible learning difficulties. There may be psychologists in your community or you may consider referral to the regional Child Health Specialty Clinic. Physicians also may consider referral to one of the clinics at the University of Iowa Children's Hospital such as the Pediatric Psychology Clinic, the Healy Clinic at the Center for Disabilities and Development, or the Child Psychiatry Clinic. A referral to the Behavioral

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Anticipatory guidance for 5-10 year olds

by Stacy McConkey, MD
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Well Child visits in the middle of childhood take on a different focus than those for younger children. Children are undergoing slower physical development in terms of growth and fine and gross motor skills, with most of the development going on in the cognitive and social skills areas. Bright Futures anticipatory guidance changes its focus to different areas as well. It may be helpful to consider some of the developmental tasks of this age group prior to going through the anticipatory guidance itself. The following is a summary of some of the developmental tasks by age:

The primary task for **5 year olds** is school readiness. How easily will the child separate from his or her parents? Are they capable of following directions, getting along with others, and do they have impulse control? What is their span of attention? These are questions that need to be addressed during the pre-kindergarten visit.

6 year olds would like to be more independent from parents and other supervisory adults, but are not always capable of making good decisions about safety. They also are developing the cognitive skills that allow them to participate in healthcare-related discussions. During this visit it is important to include them directly in the discussion to encourage these communication skills.

7 year olds are starting to develop their conscience, which assists in understanding rules and relationships, as well as the development of morals and coping skills. They are busy comparing their family's values and morals to those around them, particularly to those of their best friends, which is a new milestone for them as well.

8 year olds are developing skills in multitasking and logic, which changes how they approach school and socializing tasks.

9 and 10 year olds are possibly starting to undergo pubertal development (10 years old for girls and 11 years old for boys). They continue to desire independence from their parents, which can create some difficult situations for families. At this age it is very important for families to support their child's self-confidence and self-esteem to enable a child to withstand peer pressure.

Bright Futures Anticipatory Guidance

by Stacy McConkey, MD
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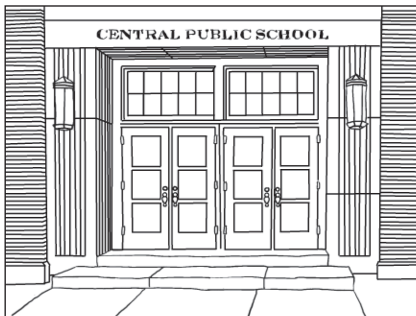
Bright Futures breaks Anticipatory Guidance into five categories: school readiness/performance, mental health, nutrition and exercise, and safety. Following are questions for physicians and suggestions for parents, appropriate for children at each age level from 5 to 10 years old.

School Readiness:

5 – 6 years old:

- If the family is recently immigrated, are there any language concerns for the child or parents?
- Does the family understand how the local school system (i.e. AEA) works?
- For a child with special healthcare needs, is the family aware of how to initiate an IEP or 504 plan?
- Encourage families to attend the back-to-school night, and school conferences.



7 – 8 years old:

- If school is not going well for a child by this age, consider asking teachers for an evaluation for specialized help or tutoring.

9 – 10 years old:

- Set aside a specific time for homework, providing a well-lit space, free of distractions.

Mental Health

5 – 6 years old:

- Establish important routines for your family, and be consistent.
- Show affection.
- Listen to and respect your child.
- Encourage teaching the difference between right and wrong and the skills to manage anger without violence.
- Encourage parents to be a good role model in anger management, self-discipline, and impulse control.
- Promote responsibility by assigning chores that are appropriate to the child's developmental level.

7 – 8 years old:

- Encourage competence, independence, and self-reliance by not doing everything for your child; rather help them do well.
- Show affection and pride in your child's special strengths and use praise liberally.

- Establish reasonable consequences for assigned chores not completed within a deadline.
- Answer a child's questions about pubertal changes honestly, simply, and at the child's level. Review information the child receives at school on the subject.

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Bright Futures Anticipatory Guidance
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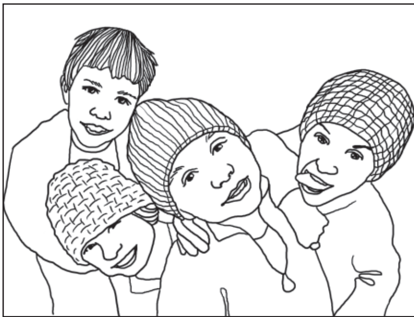
9 – 10 years old:

- Provide your child with a personal space.
- Anticipate early adolescent behavior: changes in communication, moodiness, challenges to rules, refusal to join family activities, and increased risk-taking behavior.

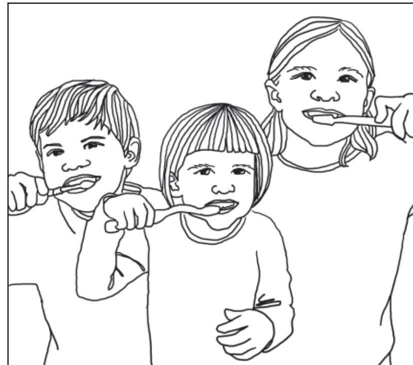


- Supervise activities of groups of children: know your child's friends.
- Help your child learn respectful behavior toward others.
- Encourage your child to ask questions about sexuality and be prepared with an answer indicating what you deem acceptable. Encourage children to delay sexual activity.
- Talk about/advise against the use of alcohol, tobacco, inhalants, and other drugs.
- Discuss your child's body image: do they feel they are too fat, too thin, or just right?

Nutrition & Exercise

5 – 6 years old:

- Breakfast—research shows that eating breakfast helps kids learn and behave better in school.
- Help your child choose appropriate foods: at least five servings of fruits and vegetables per day.
- Avoid foods that are high in fat, sugar, and calories and low in nutritional value.
- Children 4 to 8 years old need 16 ounces of low-fat milk or dairy products per day.
- Limit intake of whole fruit juice to 4 to 6 ounces per day.
- Encourage 60 minutes of exercise per day, which can be divided into shorter units of time.



- Find activities that the entire family can enjoy.
- Limit screen time (TV computer, games) to 2 hours per day. There should not be a TV in your child's bedroom.

7 – 8 years old:

- Eat meals together. Turn off the TV during meals.

9– 10 years old:

- It is almost never appropriate to lose weight while growing—discuss dieting with physician.
- Make physical activity a part of child's routine, not the exception.

Oral Health

5– 6 years old:

- Brush teeth twice daily with a pea-sized amount of toothpaste. Floss once per day.
- See a dentist every six months

7 – 8 years old:

- Use a mouth guard during sports activities.

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Iowa **EPSDT Care for Kids** Health Maintenance Recommendations

KEY

- ● To be performed
- ● (shaded) To be performed at all visits
- ✪ Screen at least once during during time period indicated
- **S** Subjective, by history; [S] each visit during time period indicated
- **O** Objective, by standard testing method; [O] each visit during time period indicated
- **A** Assess risk; [A] each visit during time period indicated

(Boxed letters/symbols spanning several ages apply to each visit in that span; in the table they are repeated in each covered age column.)

		Infancy							Early childhood						Late childhood					Adolescence			
Item	Description	2-3[1] days	by 1 mo	2 mo	4 mo	6 mo	9 mo	12 mo	15 mo	18 mo	2 yr	2.5 yr	3 yr	4 yr	5 yr*	6 yr*	8 yr*	10 yr*	12 yr*	14 yr*	16 yr*	18 yr*	20+ yr*
History	Initial/Interval	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Physical exam	As part of each visit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Measurements	Weight/length: each visit through 18 mo; BMI each visit 24 mo and older	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Head circumference	●	●	●	●	●	●	●	●	●	●												
	Blood pressure	A	A	A	A	A	A	A	A	A	A	A	●	●	●	●	●	●	●	●	●	●	●
Nutrition/Obesity prevention	Assess/educate	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Oral health	Assessment - Dental history;	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Dental referral							●		●	●	●	●			●							
	(Oral health, 6 mo – 2 yrs: Referral to dental home if available; otherwise, assess oral health)																						
Developmental and behavioral assessment	Surveillance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Developomental screening: 9, 18, 24 or 30 mo						●			●	✪	✪											
	Autism screening: 18 & 24 mo									●	●												
Sensory screening	Vision	S	S	S	S	S	S	S	S	S	S	S	O	O	O	O	O	O	O	✪	✪	O	S
	Hearing	O	S	S	S	S	S	S	S	S	S	S	S	O	O	O	O	O	S	S	S	S	S
Immunization	Perform an immunization review at each visit; administer immunizations at recommended ages, or as needed	●		●	●	●		●	●	●				✪	✪	●	●	●		✪	✪		
Anticipatory guidance	Provided at every visit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
PROCEDURES																							
Lipid screening											A			A	A	A	A	A	A	A	A	✪	✪
Hemoglobin/hematocrit	Perform once between 9-month and 12-month visits for children at risk; also annually for adolescents if risk factors are present				A			●		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Hemoglobinopathy	Only once (newborn screen) and offered to adolescents at risk.	✪																					
Lead Screening	Assess and screen children at 12 mo. and 2 years of age; Assess and test high-risk children at 18 months, 3,4, 5 and 6 years.							●		A	●		A	A	A	A							
Metabolic screening	The Iowa Newborn Screening Program tests for hypothyroidism, galactosemia, phenylketonuria, hemoglobinopathies, congenital adrenal hyperplasia, plus expanded metabolic screening.	✪																					
Sexually transmitted infections	Screen as appropriate. People with a history of, or at risk for, STIs should be tested for chlamydia and gonorrhea.																		A	A	A	A	A
Cervical Dysplasia Screening	Pap test at age 21																		A	A	A	A	●
Tuberculin test	Testing is recommended for high risk groups, which include household members of persons with TB or others at risk for close contact with the disease; recent immigrants or refugees from countries where TB is common (e.g., Asia, Africa, Latin America, Pacific islands and former Soviet Union); migrant workers; residents of correctional institutions or homeless shelters; persons with certain underlying medical disorders. Children with HIV and incarcerated adolescents should be screened yearly.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

*See below ✶

[1] For newborns discharged within 24 hours or less after delivery.

✶ **Medicaid recommends and will reimburse for annual visits for older children and adolescents, but does not yet require them.**

12/09

Diagnosis of ADHD in the Early Elementary Years
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Pediatrics Clinic at the Center for Disabilities and Development also may be indicated if the child displays oppositional behavior, noncompliance, or aggression.

Online resources are available, as well. Children and Adults with Attention Deficit Hyperactivity Disorder (chadd.org) is an excellent resource for parents. Information on local CHADD groups may be available through local schools. The American Academy of Pediatrics (aap.org) provides helpful information to physicians (toolkit for assessment) and parents (information about treatment options).

Bright Futures Anticipatory Guidance
(continued from page 4)

Safety

5 – 6 years old:

- Teach your child to safely cross streets, looking right, left, and right again. A child should not cross alone until they are10 years old.
- An adult should supervise getting on and off buses, including where to stand, wait, and when to board.
- Use a belt positioning booster until a child is 4’ 9” tall and 60-80 pounds. The child’s bottom should be in the seat crease, knees bent over edge of seat, and seatbelt across chest and legs.
- A child should stay in back seat until 13 years of age.
- Helmets should be used with all bikes, scooters, skateboards, ATV riding, horseback riding, skiing, etc.
- Teach your child to swim and never leave them alone while swimming. Do not permit swimming in fast-moving water or diving, unless the depth is checked by adult.
- Children should wear life vests while riding in boats.
- Wear sunscreen SPF 15 or higher, reapply every 2 hours.
- Discuss private parts (areas covered by swimming suits) with your child: Teach them it is never okay for another adult to ask for help with their private parts or to see yours unless a parent is present (such as during a visit to the doctor.) In addition, teach them it is never okay for another adult to ask a child to keep a secret from his or her parents.
- Install smoke detectors on all levels of your home and frequently check and change batteries. Install CO detectors on all levels of your home with bedrooms.
- Have a fire escape plan and a place to meet outside: practice it.
- If guns are in the home, have ammunition locked separately. Ask parents of your child’s friends about guns in their homes.
- Computers should be located where they can be monitored. Check Internet history frequently to see web sites visited and consider using parental safeguards or filter. Discourage online chatting and providing personal information.

7 – 8 years old:

- Ensure that your child understands how and when to call 911 and what to do in case of fire or other emergency.
- Tell them it is okay to ask to go home if they feel uncomfortable at someone’s house.
- Teach your child the rules of the road for bikes. No riding after dusk.

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The ***EPSDT Care for Kids Newsletter*** is published three times a year, in print and online, as a joint effort of the Iowa Prevention of Disabilities Policy Council, the Iowa Department of Human Services, the Iowa Department of Public Health, and the Center for Disabilities and Development, which is nationally designated as Iowa's University Center for Excellence on Disabilities. The goal of this newsletter is to inform Iowa health care professionals about the EPSDT Care for Kids program, to encourage them to make use of this important resource, and to provide them with information about a wide range of developments in the field of health care.

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