

# Attention Deficit/Hyperactivity Disorder (AD/HD)



Attention deficit/hyperactivity disorder (AD/HD) is a neurobiological condition that can cause inattention, hyperactivity and/or impulsivity, and other learning difficulties. Research suggests that AD/HD is most likely caused by abnormalities in certain neurotransmitters or messengers in the brain, making the brain inefficient or sluggish in the areas that control impulses, screen sensory input and focus attention.

There are three types of AD/HD: predominantly hyperactive-impulsive type, predominantly inattentive type, and combined type. Signs of hyperactivity may include restlessness, squirming and fidgeting, and excessive talking. Signs of impulsivity may include acting without planning or thinking first, difficulty following rules and steps, interrupting others, and difficulty managing frustration, emotions and transitions. Signs of inattention may include losing or forgetting things, frequently “tuning out,” difficulty following instructions, missing important details, difficulty staying on-task and completing assignments, poor organizational skills, difficulty with short-term memory and recall, distractibility and problems with focusing and maintaining attention. Students with predominantly inattentive type AD/HD may not be diagnosed until upper elementary and junior high school when the demands for organization and independence increase. Combined type AD/HD is diagnosed when six or more signs of hyper-impulsive type and inattentive type are present.

No one direct cause of AD/HD has been identified. Attention deficit/hyperactivity disorder tends to run in families, and does occur in both boys and girls but boys are much more likely to be diagnosed.

## Implications for Planning and Awareness

- Meet with the student and parents early in the school year to discuss how the school can support this student’s needs related to AD/HD. This could include finding out about:
  - the student’s strengths, interests and areas of need
  - the student’s specific symptoms
  - successful strategies used at home or in the community that could be used at school.
- If the student is taking medications during the school day, discuss with the parents possible side effects. Follow school and/or jurisdictional policies and protocols in storing and administering medication.
- Be aware that some students may be uncomfortable discussing or taking medications in front of peers. Collaborate with the student and family to determine how best to support the student.

Your awareness needs to begin with conversations with the student’s parents.



- Collaborate with the parents and student to consider if, and how, they would like to share specific information on AD/HD with peers. If they wish to do this, consultation with health care providers, such as school or community health nurses, may be helpful.
- Learn as much as you can about how AD/HD may affect learning and social and emotional well-being. Reading, asking questions and talking to qualified professionals will build your understanding and help you make decisions to support the student's success at school.
- Collaborate with the school and/or jurisdictional team to identify and coordinate any needed consultation and supports.
- Develop a system for sharing information with relevant staff members about the student's condition and successful strategies.

### Implications for Instruction

- Give clear, brief directions. Give written or visual directions as well as oral ones.
- Teach active listening strategies. Encourage students to delay their responses, since this is frequently an effective way to help them process more deeply what has been said.
- Remind students to “stop, think and listen” before responding, acting or making a choice.
- Break tasks and assignments into short, easy-to-manage steps. Provide each step separately and give feedback along the way.
- Help the student make a plan for a task by identifying the goal, breaking the task into steps, and identifying where to start and end. Encourage the student to use self-talk to work through more challenging tasks (e.g., “First I have to \_\_\_\_, and then I have to \_\_\_\_.”).
- Provide checklists, graphic organizers, visual referents and examples to help the student plan ahead and to stay on-task.
- Design learning activities that require a high response rate. For example, provide students with individual white boards, chalkboards, response cards or electronic tools so they can respond while working in large groups.
- Teach strategies for self-monitoring, such as making daily lists and personal checklists for areas of difficulty.
- Use instructional strategies that include memory prompts, such as mnemonics and visual prompts.
- Teach specific problem-solving strategies, and use visual supports to help the student remember what the steps are.
- Teach strategies for what to do while waiting for help (e.g., underline, highlight or rephrase directions; jot down key words or questions on sticky notes).
- Provide extra time for tasks or reduce the amount of work required.
- Provide direct instruction and practice in letter formation and page organization. If handwriting continues to be difficult as the student gets older, reduce expectations for copying, provide extra time for written work and explore the use of a word processor.
- Design math tasks and materials that consider spatial organization and fine motor difficulties. For example, reduce the amount of information on a page; provide a “window box” template to view one question at a time; provide graph paper to align numbers correctly.



- Provide opportunities for repetition and actively engage students in using memory cues to remember basic math facts. If the student continues to struggle with recall of math facts, provide reference sheets so that the student has an opportunity to apply and extend knowledge without being held back by memory issues.
- Explicitly model and teach prereading strategies that activate prior knowledge, build vocabulary and set a purpose for reading (e.g., K-W-L charts).
- Teach strategies for monitoring comprehension during reading. Physical supports, such as sticky notes or storyboard templates, may be helpful.
- Reduce distractions. For example, seat the student near your desk or in an area away from distractions, such as doors; provide a study carrel that all students can access; allow the student to listen to music using a headset to screen out noise.
- Help the student to organize belongings and work (e.g., label school supplies, colour code subject notebooks).

### Implications for Social and Emotional Well-being

- Engage the student and parents in planning for transitions between grade levels, different schools and out of school.
- Remind yourself and the student that AD/HD is a biologically based disorder. Reframe how you view the student. For example, consider that, rather than being lazy the student avoids work because he or she finds it too difficult.
- Support the development of self-advocacy skills by involving the student in selecting and monitoring supports and strategies that will work best for him or her.
- Consider having a “key person” the student can check in with on a weekly (or daily) basis to assist with goal setting, planning and self-monitoring.
- Explicitly teach social skills, such as how to read body language and expressions. Use direct instruction along with modelling, storytelling and role-play.
- Provide supports and set up the environment for success in social situations, such as:
  - using a buddy system for recess, lunch and other unstructured social times
  - providing organized activities for the student to take part in at recess or lunchtime.
- Provide clear expectations, consistency, structure and routine for the entire class.
- Use low-key cues, such as touching the student’s desk, to signal the student to think about what he or she is doing without drawing the attention of classmates.
- Provide support in transitioning from one activity or place to another. Cues, routines and purposeful activity during transitions may be helpful.
- If the student becomes over stimulated when exiting for a break, delay his or her exit for a minute or two until other students have left.
- Monitor for signs of anxiety or depression, such as visible tension, withdrawal, changes in grooming habits, missing or coming late to class, or incomplete assignments.
- Use low-key rewards and positive reinforcement rather than punishments.
- Give positive or negative consequences consistently and promptly to establish a strong connection between the behaviour and consequence.

Parents know their children well and can offer insights on how to support their social and emotional well-being. There is strength in collaborating on strategies that could be used at home, at school and in the community.



- Allow the student to stand near the front of a line, and then gradually place the student further back as his or her ability to wait improves.
- Provide opportunities for movement. Allow the student to move or stand up while working; provide the student with a fidget toy such as a necklace or squeeze ball to use quietly, as needed; provide stretch or movement breaks as part of the classroom routine; and create opportunities for the student to do errands in the classroom.
- Ensure the student goes out at recess, takes breaks or participates in physical activities to use up excess energy and restlessness.
- Use monitoring strategies to minimize opportunities for off-task or disruptive behaviour (e.g., move around the class during instructional sessions and quiet work periods; talk to students to build rapport; provide immediate, specific feedback on positive behaviours).

**As you consider the implications for this disability, think about the following questions:**

1. Do I need further conversations with the parents to better understand this student's strengths and needs?  Yes  No
2. Do I need targeted professional learning?  Yes  No  
If yes, what specific topics and strategies would I explore?
3. Is consultation with jurisdictional staff required?  Yes  No  
If yes, what issues and questions would we explore?
4. Is consultation with external service providers required (e.g., Regional Educational Consulting Services, Student Health Partnership, Alberta Children's Hospital, Glenrose Hospital)?  Yes  No  
If yes, what issues and questions would we explore?
5. Are further assessments required to assist with planning for this student?  Yes  No  
If yes, what questions do I need answered?
6. Is service to the student from an external provider required?  Yes  No  
If yes, what outcomes would be anticipated?

**Links for further information:**

Alberta Education. *Focusing on Success: Teaching Students with Attention Deficit/Hyperactivity Disorder*. <http://education.alberta.ca/media/511987/focus.pdf>

Centre for ADD/ADHD Advocacy, Canada. "Information for Educators on ADHD." <http://www.caddac.ca/cms/page.php?50>

TeachADHD. <http://research.aboutkidshealth.ca/teachadhd>

U.S. Department of Education. *Teaching Children with Attention Deficit Hyperactivity Disorder: Instructional Strategies and Practices*. <http://www2.ed.gov/rschstat/research/pubs/adhd/adhd-teaching.html>

**Please note:**

These websites are for information only and the user is responsible for evaluating the content and appropriate uses of the information.

