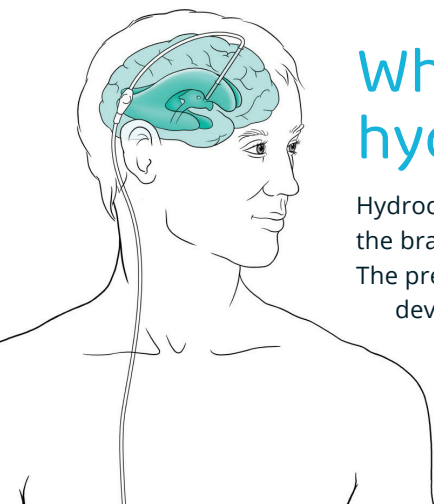


Teacher's Guide to HYDROCEPHALUS

Middle School (Grades 6-8)



What is hydrocephalus?

Hydrocephalus is an abnormal accumulation of fluid in the brain, causing pressure on the brain. There is no cure. The predominant treatment is the insertion of a medical device called a shunt that drains fluid from the brain to another part of the body. Some children have a procedure called an ETV that allows many to live without a shunt. Both treatments can fail at any time.



Every child is unique.

This holds true for their hydrocephalus, related conditions, symptoms, strengths, needs, and challenges. In some cases, a child may excel academically without any classroom accommodations. In other cases, a child may require a 504, IEP, or ESP (private school).

Signs and symptoms of a medical complication.

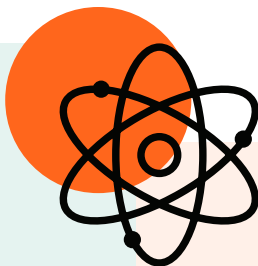
Teachers must be aware of potential medical complications related to the treatment of the child's hydrocephalus. Complications can appear over time or suddenly, creating an emergency medical situation. If not recognized in a timely manner, a child could sustain brain damage. Signs to be aware of include:

- Vomiting
- Headache
- Vision problems
- Irritability
- Tiredness
- Personality changes
- Loss of coordination or balance
- Fever
- Redness or swelling along the shunt tract

Teachers may also notice subtle, unexplained changes in the normal behavior of a student, possibly over days or weeks, such as:

- Decline in academic performance
- Changes in a child's ability to attend or concentrate
- Difficulty grasping and/or retaining new concepts
- Challenges with organization
- Difficulty with multi-step directions

It is the teacher's responsibility to communicate observations with parents and the school nurse.



Hydrocephalus can be present with these conditions.

- Spina Bifida
- Cerebral Palsy
- Seizures/Epilepsy
- Brain Tumor
- Dandy Walker Malformation
- Chiari Malformation
- Autism

How can it impact their physical time in the classroom?

- Migraines and/or chronic headaches
- Vision problems
- Fatigue
- Anxiety/Depression
- ADHD
- Chronic pain
- Absences due to medical appointments

All of these can make it hard for a student to perform each day. Each day can also be different depending on how the child is feeling and how well the fluid is draining from their brain.

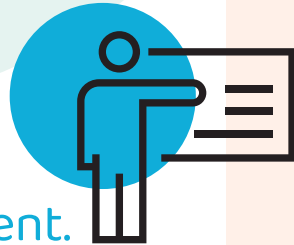




How can hydrocephalus impact learning?

It's not uncommon for the challenges children with hydrocephalus face to appear similar to those faced by peers diagnosed with ADHD and/or Autism. Common challenges can include:

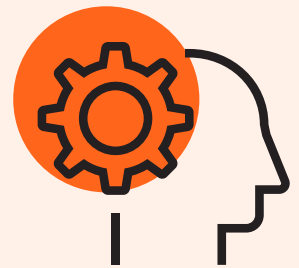
- Sustained Attention
- Memory (working and short-term)
- Self-monitoring
- Problem-solving
- Initiation
- Organization
- Sequencing
- Comprehension
- Transitioning, including physically between classes



Helpful tips for teaching your student.

- Learning through a combination of seeing, hearing, and doing. For example, use images and graphics, verbal presentations, and a physical, hands-on approach.
- Repetition to learn a concept.
- Providing graphic organizers to help with organization.
- Verbalizing what's been taught. Allow the student to teach or show someone what they have learned. This can be a good testing tool, as well.
- Providing clear structure and predictable routines.
- Reteaching. Children and teens may not remember what they were taught and will need to be retaught material. Often a paraeducator can help.
- Cueing often but in a way that does not attract unnecessary attention.
- Scaffolding - break things down.
- Providing recognition formats (e.g., picture cues, word banks, etc.) if a student struggles to recall information they have learned.
- Providing opportunities for personal space and "brain breaks."

What can the impact look like?



- Inconsistent performance
- Difficulty with unstructured tasks
- Difficulty with time management
- Overwhelmed by large amounts of information
- Difficulty retrieving information spontaneously or answering open-ended questions
- Difficulty keeping up with information to complete a task
- Difficulty keeping up with and maintaining conversations
- Poor attention/Distractible/"Zones out"
- Difficulty forming theories and problem solving
- Answering questions literally without expanding (can appear lazy or unmotivated)
- Getting lost frequently or easily, both physically and academically
- Difficulty letting go of a thought (rigidity of thinking which can appear stubborn or argumentative)
- Difficulty organizing desk/backpack/lockers (seems messy); keeping track of materials between school and home
- Difficulty planning and/or organizing long-range projects
- Conversing freely but lacking depth in conversation
- Difficulty picking up on social cues and complex adolescent social rules
- Difficulty making or keeping friends



Language-based Classes

Poor reading comprehension and inference abilities

Struggles to see the big picture or read between the lines

Difficulty summarizing

Poor note-taking skills

Difficulty organizing written work/constructing an essay

Poor study skills and memorization of facts

Math and Science

Difficulties recalling math facts (math fluency)

Difficulty solving problems mentally (mental math)

Difficulties with word problems

Difficulties with sequential tasks (applying procedural knowledge)

Difficulties for completing worksheets with too many items

Challenges brainstorming

About My Child

NAME _____



My Child's Treatment (shunt/etv):

Signs something is not right (signs of shunt or ETV failure):

Last brain surgery/# of surgeries/frequency:

My child's academic strengths:

My child's academic struggles:

My child has been diagnosed with (learning disabilities) or receives therapy for:

My child's social strengths:

My child's social struggles:

My child's physical struggles:

Strategies that work for my child:

My child's interests and activities outside of school:

To learn more about hydrocephalus, visit the Hydrocephalus Association website at www.hydroassoc.org