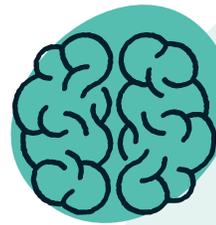
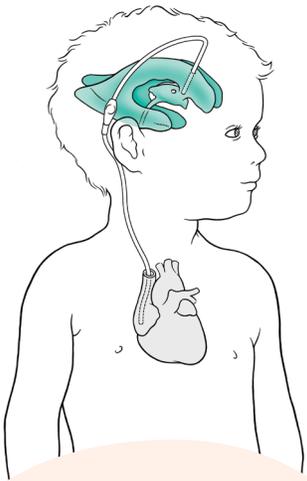


Teacher's Guide to HYDROCEPHALUS

Late Elementary School (Grades 3-5)

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.

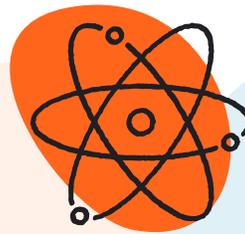
Teachers must be aware of potential medical complications related to the treatment of the child's hydrocephalus. Complications can appear over time or suddenly, creating an emergency medical situation. If not recognized in a timely manner, a child could sustain brain damage. Signs to be aware of include:

- 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
- Inconsistent levels of engagement
- 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
- ADHD
- Chronic pain
- Neck stiffness
- Balance and/or coordination
- 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
- Working memory
- Self-monitoring
- Problem-solving
- Initiation
- Organization
- Sequencing
- Transitioning
- Motor functioning
- Comprehension
- Developmental Delays



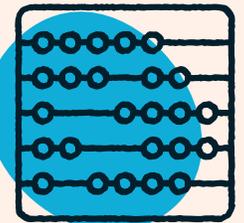
Helpful tips for teaching your student

- Learning through a combination of seeing, hearing, and doing. For example, doing a problem while the teacher is also doing it on the board and then explaining to a teacher how it was done.
- Repetition to learn a concept, which can also entail providing extra problems or resources (paper or online).
- 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 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.
- Allowing extra time for tests or longer assignments.
- Providing a separate room for exams, away from distractions.
- Scaffolding - break things down
- Providing opportunities for personal space and "brain breaks."

What can the impact look like?



- Distractibility/Off task behaviors (e.g., talking to neighbors, playing with items on the desk)
- Inconsistent performance and/or making seemingly careless mistakes
- Forgetfulness; may not remember information taught
- Difficulty following directions, completing assignments, or keeping track of deadlines
- Difficulty "remembering to remember" to do something in the future (Prospective memory) such as classroom routines, daily routines (art on Mondays, music on Tuesdays, etc.)
- Answering questions literally without expanding (can appear lazy or unmotivated)
- Hard time letting go of a thought (rigidity of thinking which can appear stubborn or argumentative)
- Difficulty organizing time, materials, backpacks, and desks
- Getting lost frequently or easily, both physically and academically
- Deficits in fine motor and gross motor skills
- Conversing excessively and freely but lacking depth in conversation
- Difficulty picking up on social cues and making or keeping friends



Language-based Classes

Delayed reading fluency
May still be decoding

Poor reading comprehension and inference abilities

Struggles seeing the big picture or drawing conclusions

Poor note-taking skills

Difficulty summarizing

Challenges brainstorming

Difficulty organizing written work/constructing an essay

Math and Science

Challenges in performing mental math

Difficulties with sequential tasks
Procedural knowledge

Difficulties with word problems

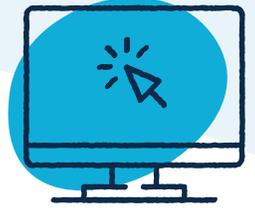
Difficulties with multi-step problem solving

Difficulties in completing worksheets with too many items

Timed assignments/ tests
Basic facts

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