

# CHRONIC PAIN AND RELATED FUNCTIONAL IMPAIRMENT

## What is it?

Pediatric chronic pain presents in a variety of ways and often overlaps with psychological disorders. It represents a developmental health issue because of its ability to significantly impair a student's functional ability. Chronic pain can be persistent and episodic with both an underlying health condition (e.g. Sickle cell disease) and pain that is the pain disorder itself (e.g. Complex Regional Pain Disorder.) The symptoms extend beyond the expected healing period and are commonly described as persisting for at least 3 months. The three most common pain disorders in children include primary headaches, abdominal pain, and recurrent musculoskeletal and joint pain.

A child's developmental perspective affects how he/she will perceive and respond to pain. Psychological variables influencing pain prevalence include anxiety, depression, low self esteem, low socio-economic status, and other chronic health conditions. Chronic pain may peak during adolescence; related to puberty and the physical, emotional, social, and cognitive changes during this stage. Pediatric chronic pain can affect all aspects of daily living including appetite, sleep, socialization, school attendance, academic performance, and peer relationships. A child's perception of pain and response to pain can also be influenced by parental characteristics like emotional function, behavior, health history, and environment.

Pediatric chronic pain can also surface without clear medical evidence to a broader syndrome or condition. Functional somatic symptoms, like pain and fatigue, are physical symptoms not fully explained by a well-defined medical, psychiatric, or somatic illness. A growing number of patients are seeking pain treatments for sensory processing disorders. Pediatric chronic pain presents in a variety of medical diagnoses, conditions, situations, and locations.

- Chronic abdominal pain
- Chronic musculoskeletal pain
- Headaches
- Persistent post-surgical; pain
- Pain-associated disability
- Sports injuries
- Amputation/phantom pain
- Complex regional pain syndrome (CRPS)
- Postural orthostatic tachycardia syndrome (POTS)
- Amplified musculoskeletal pain syndrome (AMPS)
- Sickle cell pain
- Ehlers-Danlos syndrome
- Chronic unexplained pain
- Functional gait disorders
- Pain-related mental health symptoms such as depression or anxiety
- Hypermobility
- Pelvic pain
- Neuropathic pain

## What is the treatment?

The goal of treatment for pediatric chronic pain is to help the child improve functional outcomes. Treatment is not solely focused on providing pain medication but to develop new tools to manage pain levels. A multidisciplinary approach is used to help the child regain control and resume normal function. Treatment strategies often focus on minimizing response to pain complaints, encouraging adaptive behavior, regaining physical strength and endurance, and addressing emotional needs. Whenever possible, managing pain is done without the use of pain medication. Narcotics, in particular, are almost never used in a treatment plan. They can alter the student's ability to recognize their pain therefore, they are unable to react by using their coping strategies. An effective treatment plan could include cognitive behavior therapy; used to change the perception and physiologic response to pain.



Kennedy Krieger Institute

The **Specialized Health Needs Interagency Collaboration (SHNIC)** program is a collaborative partnership between the Kennedy Krieger Institute and the Maryland State Department of Education.

## Suggested school accommodations

Chronic pain is a developmental health concern that can interfere with a student’s daily function. Students are at an increased risk for missing school, withdrawing from activities and peers, experiencing difficulties with both memory and concentration, and decreased stamina and initiation. These students may also report increased pain when presented with a physical or cognitive task they find demanding. Despite school absences, children with chronic pain tend to perform similarly to peers in processing information and academic achievement. These children actually do best when they attend school regularly, use pain coping strategies, and distraction techniques. It is important to identify the teachers’ perception of and reaction to chronic pain symptoms and behaviors in order to improve the student’s functional ability. Social judgment, reaction, and perceived lack of support could potentially influence the student’s ability and motivation in the classroom. A re-entry plan should include discussion about gradual return to school demands, pain triggers, possible modifications to the physical environment, and structured breaks. Supporting students with this condition in the school require educators and parents/guardian to work as a team. Some accommodations to consider for a 504/IEP could include:

- Emotional support
- Check-in plan/schedule with guidance counselor
- Modified or flexible school day
- Plan for absences and make-up work
- Modified classroom and school environment (avoid high traffic and bumping into student during changing of classes/dismissal time, avoid classrooms on different levels, consider distance between classrooms)
- Designated parking spot or drop-off location close to school entrance
- Ergonomic classroom assessment (set up of work area, chairs)
- Adapted/modified PE or recess
- Breaks or rest period
- Copies of notes and lectures
- Oral versus written testing
- Use of technology for lecture, writing
- Extra set of books for home
- Peer support system
- Staff education/training as appropriate
- Emergency Evacuation Plan (EEP)

## Specific health issues for Individualized Health Care Plan

- Diagnosis including co-occurring diagnoses, effects, and their impact on learning
- Pain protocol including student’s coping strategies
- Current medication list including PRN medications, note side effects
- Review of current treatments or protocol plan
- Identify potential triggers for pain reaction (touch, light, sound, smell)
- Physical limitations or restrictions
- Communicate with school staff, parents/guardian, and provider any changes or concerns about the disease
- Emergency Care Plan(s) (ECP) related to medical needs in the school setting and staff education/training as appropriate for each

### Resources & Manuals

#### Kennedy Krieger Institute– Pain Rehabilitation Program

<https://www.kennedykrieger.org/patient-care/centers-and-programs/pain-rehabilitation-clinic-outpatient>

#### Kennedy Krieger Institute– A Guide for Working with Students with Chronic Pain

<https://www.kennedykrieger.org/sites/default/files/library/documents/community/specialized-health-needs-interagency-collaboration-shnic/guide-working-students-chronic-pain.pdf>

#### Meg Foundation– Empowering Families to Prevent and Relieve Pain

<https://www.megfoundationforpain.org/>