

What is it?

Pediatric chronic can present in a variety of ways and often overlaps with psychological effects. It represents a developmental health issues 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 is 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 diagnosis, conditions, situations, and locations.

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

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 so without the use of pain medication. Narcotics, in particular, are almost never used in a treatment plan because they can alter the student's ability to recognize and react to the pain using their coping strategies. An effective treatment plan could include cognitive behavior therapy; used to change the perception and physiologic response to pain.

Suggested school accommodations

Chronic pain is a developmental health concern that can interfere with a student's daily function. The effects on school are far-reaching. These 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. The student's 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; using pain coping strategies and distraction techniques. Accommodations make it possible for children to succeed in spite of their pain.

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 talks about a gradual return to school demands, pain triggers, possible modifications to physical environment, and structured breaks. The school nurse should be involved in such discussions and not limited to administration of pain medications, when necessary. Chronic pain conditions are often hidden and open communication and positive reinforcement will help establish and modify the best plan for student success.

- Consider 504/IEP plan
- Check-in plan/schedule with guidance counselor
- Absence reporting system or plan (planned/unplanned absences)
- Modify the classroom and school environment to avoid high traffic and bumping into student (changing of classes, dismissal time)
- Avoid mobility stressors (classroom on different levels, distance between classrooms, crowded halls)
- Designated parking spot or drop off close to school entry
- Ergonomic classroom assessment (set up of work area, chairs)
- Adapted/modified PE or recess
- Modified or flexible school day
- Training of staff
- Breaks or rest period
- Safe, quiet space
- Copies of notes and lectures
- Oral versus written testing
- Use of technology for lecture, writing
- Extra set of book for home
- Peer support system
- Educating peers (with child and family permission)

SHNIC school nurses information:

Specific health issues for individual health care plans

- 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

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>