



Cerebral Palsy

Possible Associated Impairments

Motor impairments- fine and gross motor

Intellectual or learning disabilities

Speech- language disorders (dysarthria, expressive, receptive)

Visual impairments

Hearing impairments

Language impairment

Seizure disorder

Feeding and growth concerns

Emotional/behavioral disorders

Osteopenia (weak bones due to poor nutrition and lack of weight-bearing activities, resulting in bone fractures)

About the Disorder

Cerebral Palsy is a general term most widely defined as a disorder of movement and posture due to a defect or lesion of the immature brain. A current definition being used by the international community is stated as “a group of disorders of the development of movement and posture, causing activity limitation, that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, cognition, communication, perception, behavior, and/or seizure disorder.” The degree of muscle tone associated with cerebral palsy may either be low (hypotonia) or high (hypertonia), which is often associated with spasticity. Categories defining level of involvement include: **Mild:** Independent in meeting physical needs; potential to improve quality of motor and/or perceptual skills with therapy intervention; and potential for regression of motor skills without proper intervention. **Moderate:** Some independence in meeting physical needs; functional head control; perceptual and/or sensory integrative deficits interfere with achievement of age-appropriate motor skills. **Severe:** Total dependence in meeting physical needs; poor head control; perceptual and/or sensory integrative deficits prevent achievement of age-appropriate motor skills.

Classification of subtypes of cerebral palsy include:

Spastic cerebral palsy: Defined as the most common subtype, and further categorized according to the limbs involved. Spastic hemiplegia is diagnosed when one side of the body is more affected than the other; usually, the arm is more affected than the leg. Right-side hemiplegia implies damage to the left side of the brain. In spastic diplegia, the legs are more affected than the arms. This is the type that is most frequently associated with premature birth. In spastic quadriplegia, all four limbs, the trunk and the ‘speech’ muscles (mouth, tongue, and pharynx) are typically affected. Individuals with spastic quadriplegia often have cognitive impairment, seizures, sensory impairments, and medical complications.

Dyskinetic cerebral palsy: Characterized by abnormalities in muscle tone that involve the whole body, and are defined by changing muscle tone, and involuntary movements. **Athetoid cerebral palsy** is a form of dyskinetic type. **Ataxic cerebral palsy:** Characterized by abnormalities of voluntary movement involving balance and position of the body in space. May have increased or decreased muscle tone. **Mixed cerebral palsy:** Includes more than one of the above subtypes effort



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Educational Considerations

•Specialized school services and instruction are often required, such as occupational therapy, physical therapy, speech therapy, adaptive physical education (DAPE), instructional support from a special education teacher, and school nurse services. Mandated services from the Physical/Health Disabilities (P/HD) teacher will also need to be integrated into the student's program. Multiple services may often take students out of the classroom. Scheduling therapies around academic instruction should be encouraged as much as possible. If support from paraprofessionals are a part of the student's educational program, training, support, and frequent check-ins are critical in assuring the student's educational needs are being appropriately addressed.

•Physical access to the school sub-environments (building entry, access to multiple floors, classrooms, lunchroom, gym, recess area, restrooms, etc.) and related accommodations should be evaluated often, such as automated door switches, modified door handles, elevator access, support bars and widened stalls in restroom, modified desks/chairs, preferential seating, locker access, and additional time for transitions. A customized school emergency evacuation plan should be developed, shared and placed in the student's file before the first day of school, and include assigned staff, responsibilities, and protocol for type of emergency.

•Materials and instructional methods should be carefully monitored and adapted, including access to assistive technology such as electronic text books, devices, specialized keypads, apps and software; alternative notetaking methods; alternative test environment; and supplemental and/or alternative curriculum, to name a few examples. Instructional strategies for organization, attention, memory, and time management are often critical adaptations in an educational plan. Other accommodations may include:

- Modified assignments and tests (length, content)
- Organizational, time management, and self-advocacy instruction
- Customized post-secondary planning
- (Updated 2018)

Resources

United Cerebral Palsy www.ucp.org

National Institute of Neurological Disorders and Stroke
<https://www.ninds.nih.gov/Disorders/All-Disorders/Cerebral-Palsy-Information-Page>

Books Available in the Metro ECSU
Judy Wolff Library:

College Success for Students with
Disabilities (2012)

By Chris Wise Tiedemann

Just One of the Kids: Raising a
Resilient Family When One of Your
Children Has a Physical Disability
(2013)

Kay Harris Kriegsman, Ph.D. and
Sara Palmer, Ph.D.

Teaching Individuals with Physical
or Multiple Disabilities (2009)

By Sherwood J. Best & Kathryn W.
Heller

