

KNOW BEFORE YOU KNOCK



LOW MUSCLE TONE

Every child and family has unique aspects of their situation, experience, and diagnosis. This page is intended to provide a general overview, but is not attempting to represent every situation or child you encounter. Every family deserves your expertise to assess and adapt your prior knowledge. This resource is best viewed electronically.

DEFINITION

"Muscle tone refers to the way muscles resist when another person (or force) stretches or pushes on them... in hypotonia, this resistance is lower than normal."⁽¹⁾
"Hypo-" means low, so "hypotonia" is a medical term meaning low or decreased muscle tone.

PREVALENCE

There is not researched prevalence data on this topic as it is generally viewed as a symptom of another diagnosis such as Down Syndrome, Ehlers Danlos Syndrome, Muscular Dystrophy, and Prader Willi's Syndrome. There are also cases where a cause is unknown; this is called "Benign Congenital Hypotonia."

CONSIDERATIONS THAT MAY IMPACT SERVICES

- Type of hypotonia:
 - Benign Congenital (no known cause) or Secondary Hypotonia (related to a known diagnosis)
 - Central (caused by "hypoxic encephalopathy, brain anomalies/insults, genetic/chromosomal syndromes, congenital or acquired infections, and disorders of metabolism" vs Peripheral (caused by "spinal muscular atrophy, myasthenia gravis, drug/toxin exposure, hereditary neuropathies, muscular dystrophies, congenital or metabolic myopathies, and congenital myotonic dystrophies")⁽⁸⁾
- Know when to refer for additional testing 46% of children with hypotonia have a family history of hypotonia ⁽⁶⁾

NATIONAL/STATE ORGS

[Hypotonia - Child Neurology Foundation](#)

TOP RESOURCES

[Hypotonia - Abstract - Europe PMC](#)

[Children's Wisconsin Hypotonia Guidance](#)

[Kids Health Info: Low muscle tone](#)

DIFFERENCES THAT MAY BE PRESENT

- Delayed motor milestones effect development across all areas^(2, 3, 4)
- Hypermobile joints
- Atypical motor milestones such as:
 - lack transitional movements
 - avoid weight bearing
 - sit with slouched posture
 - W sitting
 - "Froglike" posture in supine ⁽⁵⁾
 - excess ankle valgus (flat feet)
 - difficulty isolating muscle contractions
 - decreased proprioception
 - Decreased protective responses ⁽⁶⁾
- Difficult to motivate to move
- Delayed speech milestones -
 - feeding challenges ^(3, 4)
 - overstuffing food
 - tongue thrust
 - decreased awareness of tongue
- Constipation ⁽⁷⁾

SUPPLEMENTARY TESTS THAT COULD BE USED OR SEEN IN MEDICAL RECORDS

"Pull to sit" and "vertical suspension" most common screening positions⁽⁹⁾
Important to ask: "details about fetal movements, presentation at birth, amniotic fluid amount throughout pregnancy, and complications during delivery... maternal exposure to toxins or drugs, any infections during pregnancy, mode of delivery, gestational age, and Apgar score..."⁽⁸⁾

LANGUAGE TO USE/AVOID

Avoid: lazy, weak

Use: flexible, need more input to "wake up" muscles