

# BC Cerebral Palsy Community Diagnostic Care Pathway

If medical risk factor(s) is present, and no early motor screening has been done before, consider using this pathway.

**Clinical red flag(s)<sup>1</sup> identified** by parent or caregiver, primary care provider (PCP)

*Note: A single risk factor or red flag is enough to initiate the algorithm.*

**PCP to refer to:**

- General pediatrician or pediatric neurologist
- Infant Development Program (IDP) or a child development centre (CDC) for early intervention if parents have not already self-referred

**Pediatric provider to perform a comprehensive assessment including**

- Full medical and developmental history
- Full neurological exam

**Suggested supportive tools for diagnosis**

- GMA\*** (<5 months)
- HINE\*** (<2 years)
- Brain MRI**

**Other motor function assessments**

- TIMP\*** (<4 months)
- AIMS\*** (<18 months)
- DAYC\*** (<6 years)

*\*These assessments can be completed by allied health professionals in the community (occupational therapist or physiotherapist).*

**Level of evidence<sup>2</sup>**

- STRONG**
- WEAK**

Continue monitoring, consider other diagnoses or investigations

**NO**

Meets criteria for CP\*\* diagnosis?

**UNSURE**

Subspecialist consultation as needed, e.g.,  
Neuromotor Physician-to-Physician Consult Service



**YES OR HIGH RISK**

- Communicate diagnosis to caregivers
- Referral to appropriate interventions & supports
- Screen for developmental and medical co-occurring conditions common in CP
- Follow up and re-assess depending on clinical presentation

**\*\*Criteria for CP**

Sign(s) consistent with a non-progressive brain disturbance (such as but not exclusive to upper motor neuron signs etc.)

AND

History or investigations consistent with early non-progressive brain disturbance

AND

Observation or report of activity limitation due to motor impairment (including delay in or not achieving milestones)

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## Definitions

*Cerebral palsy* Cerebral palsy is a group of permanent 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.<sup>3</sup>

<i>GMA</i>	General Movement Assessment
<i>HINE</i>	Hammersmith Infant Neurological Exam
<i>TIMP</i>	Test of Infant Motor Performance
<i>AIMS</i>	Alberta Infant Motor Scale
<i>DAYC</i>	Developmental Assessment of Young Children

## Medical Risk Factors<sup>1</sup>

- Prematurity - <32 weeks
- Very Low birth weight - <1500 g
- Cystic Periventricular Leukomalacia (PVL)
- Intraventricular Hemorrhage (IVH) Grade III-IV
- Moderate to severe neonatal Encephalopathy (including, but not restricted to: HIE, infectious encephalopathy)
- Neonatal meningitis
- Congenital CNS defects
- Severe traumatic brain injury requiring hospitalization or rehab, or any history of hospitalization due to encephalitis or bacterial meningitis, before the age of two years
- Postnatal meningitis
- Genetic abnormality associated with CP
- Placental abruption
- Apgar <7 at age 5 minutes
- History of stroke in child

## Clinical/Developmental Red Flags<sup>1</sup>

- Child demonstrates a hand preference before 12mo of age
- Child is not able to sit without support beyond 9mo of age
- Child demonstrates stiffness or tightness in the legs
- Child keeps their hands fisted (closed/clenched) after the age of 4mo
- Child demonstrates a persistent head lag beyond 4mo of age
- Child demonstrates consistent asymmetry of posture and movement after the age of 4mo
- Child demonstrates persistent primitive reflexes, including startle (Moro) reflex beyond 6mo of age, or "Fencer" (ATNR) beyond 4mo of age
- Child demonstrates consistent toe-walking or asymmetric-walking beyond 12mo of age
- Unable to walk by 18mo of age

## References

1. BC Cerebral Palsy Advisory Committee. Executive Summary and Final Report – Evidence Informed Care for Children with Cerebral Palsy in British Columbia. 2021.
2. Novak I, Morgan C, Adde L, et al. Early, Accurate Diagnosis and Early Intervention in Cerebral Palsy: Advances in Diagnosis and Treatment. *JAMA Pediatr.* 2017;171(9):897. doi:10.1001/jamapediatrics.2017.1689
3. Rosenbaum P, Paneth N, Leviton A, et al. A report: the definition and classification of cerebral palsy April 2006. *Dev Med Child Neurol Suppl.* 2007;109:8-14.
4. American Academy for Cerebral Palsy and Developmental Medicine Early Detection of Cerebral Palsy Care Pathway Team. Early Detection of Cerebral Palsy Care Pathway. 2020. <https://www.aacpdm.org/publications/care-pathways/early-detection-of-cerebral-palsy>

**Authors:** The CP Early Diagnosis Team, Sunny Hill Health Centre at BC Children's Hospital (Ram Mishal, MD, Mor Cohen-Eilig, MD, Anamaria Richardson, MD, Vivian Wong, Olivia Scoten, Keith O'Connor B.Sc OT, MScR, Nandy Fajardo, B.Sc PT)

For more clinician resources on early diagnosis of CP, visit <https://ubccpd.ca/cp-resources>



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