

GMFCS Scale

Patient's name: _____ Date of birth: _____
Gender: _____ Address: _____
Guardian's name: _____ Contact #: _____
Email: _____ Examiner: _____

The Gross Motor Function Classification System or GMFCS is a five-level classification that differentiates children with cerebral palsy based on the child's current gross motor abilities, limitations in gross motor function, and need for assistive technology and wheeled mobility.

The Gross Motor Function Classification System Expanded and Revised (GMFCS—E&R), the scale's expanded and revised version, is comprised of five age groups: under 2 years, 2-4 years, 4-6 years, 6-12 years, and 12-18 years.

GMFCS E & R before 2nd birthday

GMFCS level I

- Can move in and out of sitting and floor sit with both hands free to manipulate objects
- Can crawl on hands and knees, pull to stand, and take steps holding onto furniture
- Infants walk between 18 months and 2 years of age without the need for any assistive mobility device.

GMFCS level II

- Can maintain floor sitting but may need to use their hands for support to maintain balance.
- Can creep on their stomach or crawl on their hands and knees
- May pull to stand and take steps holding on to furniture

GMFCS level III

- Can maintain floor sitting when the low back is supported
- Can roll and creep forward on their stomachs

GMFCS level IV

- Has head control, but trunk support is required for floor sitting
- Can roll to supine and may roll to prone

GMFCS level V

- Physical impairments limit voluntary control of movement
- Unable to maintain antigravity head and trunk postures in prone and sitting.
- Require adult assistance to roll

GMFCS E & R before 2nd and 4th birthday

GMFCS level I

- Can floor sit with both hands free to manipulate objects
- Movements in and out of floor sitting and standing are performed without adult assistance
- Can walk as the preferred method of mobility without the need for any assistive mobility device

GMFCS level II

- Can floor sit but may have difficulty with balance when both hands are free to manipulate objects
- Movements in and out of sitting are performed without adult assistance
- Can pull to stand on a stable surface
- Can crawl on hands and knees with a reciprocal pattern, cruise holding onto furniture, and walk using an assistive mobility device as preferred methods of mobility

GMFCS level III

- Can maintain floor sitting often by "W-sitting" (sitting between flexed and internally rotated hips and knees) and requires adult assistance to assume sitting
- Can creep on their stomach or crawl on hands and knees (often without reciprocal movements) as their primary methods of self-mobility
- May pull to stand on a stable surface and cruise a short distance
- May walk short distances indoors using a hand-held mobility device (walker) and adult assistance for steering and turning

GMFCS level IV

- Can floor sit when placed but are unable to maintain alignment and balance without the use of their hands for support
- Can frequently require adaptive equipment for sitting and standing
- Self-mobility for short distances (within a room) is achieved through rolling, creeping on the stomach, or crawling on hands and knees without reciprocal leg movement

GMFCS level V

- Physical impairments restrict voluntary control of movement and the ability to maintain antigravity head and trunk postures
- All areas of motor function are limited
- Functional limitations in sitting and standing are not fully compensated for through the use of adaptive equipment and assistive technology
- Has no means of independent movement and are transported
- Some children achieve self-mobility using a powered wheelchair with extensive adaptations

GMFCS E & R between 6th and 12th birthday

GMFCS level I

- Can walk indoors and outdoors and climb stairs without using hands for support
- Can perform usual activities such as running and jumping
- Has decreased speed, balance, and coordination

GMFCS level II

- Has the ability to walk indoors and outdoors and climb stairs with a railing
- Has difficulty with uneven surfaces, inclines, or in crowds
- Has only minimal ability to run or jump

GMFCS level III

- Walks with assistive mobility devices indoors and outdoors on level surfaces
- May be able to climb stairs using a railing
- May propel a manual wheelchair (may require assistance for long distances or uneven surfaces)

GMFCS level IV

- Walking ability is severely limited even with assistive devices
- Uses wheelchairs most of the time and may propel their own power wheelchair
- May participate in standing transfers

GMFCS level V

- Has physical impairments that restrict voluntary control of movement and the ability to maintain head and neck position against gravity
 - Is impaired in all areas of motor function
 - Cannot sit or stand independently, even with adaptive equipment
 - Cannot independently walk, though may be able to use powered mobility
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GMFCS E & R between 12th and 18th birthday

GMFCS level I

- Walks independently at home, school, outdoors, and in the community
- Climbs curbs and stairs without physical assistance or a railing
- Performs gross motor skills such as running and jumping with decreased speed, balance, and coordination

GMFCS level II

- Walks indoors and outdoors but may require a hand-held mobility device for safety in certain environments
- Climbs stairs with a railing
- Uses wheeled mobility outdoors or in the community for long distances
- Has only minimal ability to run or jump

GMFCS level III

- Walks with a hand-held mobility device indoors and outdoors on level surfaces
- Climbs stairs with supervision or assistance while holding onto a railing
- Uses a manual or powered wheelchair at school and may self-propel a manual wheelchair
- Relies on wheeled mobility or powered mobility outdoors and in the community

GMFCS level IV

- Uses wheeled mobility in most settings
- Requires physical assistance from 1–2 people for transfers
- Walks short distances indoors with physical assistance or a body support walker
- Operates a powered wheelchair when possible or is transported in a manual wheelchair

GMFCS level V

- Is transported in a manual wheelchair in all settings
 - Has limited ability to maintain head and trunk posture against gravity
 - Has physical impairments that restrict voluntary control of movement, including leg and arm movements
 - Cannot independently walk or use self-mobility, though may use powered mobility with assistive technology
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Evaluation

Additional notes

Palisano, R., Rosenbaum, P., Walter, S., Russell, D., Wood, E., & Galuppi, B. (1997). Development and reliability of a system to classify gross motor function in children with cerebral palsy. *Developmental Medicine and Child Neurology*, 39(4), 214–223. <https://doi.org/10.1111/j.1469-8749.1997.tb07414.x>

Palisano, R., Rosenbaum, P., Bartlett, D., & Livingston, M. (2007). *Gross Motor Function Classification System - Expanded & Revised (GMFCS - E&R)*. CanChild Centre for Childhood Disability Research, McMaster University.