

Tabulated reference percentiles for the 66-item Gross Motor Function Measure for use with children having cerebral palsy

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Last Modified: September 2008

Background and Use. This document provides tabulated percentiles for GMFM-66 scores presented by levels of Gross Motor Function Classification System (GMFCS). It is suitable for scientific or clinical use in conjunction with the GMFM-66 manual for the assessment of gross motor function among children with cerebral palsy.

The development and appropriate use of these reference percentiles is reviewed in:

Hanna SE, Bartlett DJ, Rivard LM, Russell DJ. Reference curves for the Gross Motor Function Measure: Percentiles for clinical description and tracking over time among children with cerebral palsy. *Phys Ther.* 2008;88: 1-12.

To use these percentiles, you must refer to the above document, as well as the GMFM-66 manual:

The Gross Motor Function Measure (GMFM-66 & GMFM-88) User's Manual (Russell, D., Rosenbaum, P., Avery, L. & Lane, M.) Clinics in Developmental Medicine No. 159, 2002. Published through Mac Keith Press in the U.K. and distributed through Blackwell Publishing.

These percentiles are derived from a longitudinal sample of 1940 GMFM-66 assessments of 650 children with CP, 2-12 years of age. This stratified (by age and GMFCS) random sample was collected from among all children with CP who were receiving a variety of developmental therapies and services at publicly funded children's rehabilitation centres in Ontario Canada, between 1996 and 2001.

Reference percentiles are constructed by selecting a clinically appropriate comparison group and developing a statistical summary of the distribution of scores for this group. When referencing a particular child's motor performance, find the table for his or her GMFCS level, scan across the row that is closest to this child's age, and find the number that is closest to his or her GMFM-66 score. The corresponding column heading gives the child's approximate percentile score, which is the percentage of children in the normative sample that this child is expected to outperform. Unlike raw GMFM-66 scores, which measure motor ability, GMFM-66 percentiles measure *only relative ability compared with other children of the same age and GMFCS*.

These percentiles are for use only in the assessment of children with CP. You must consider whether the normative sample is appropriate for your child, you must be familiar with the use of reference percentiles in general, and you must refer to the documents cited above. When evaluating percentile change over time, it is typical for percentile scores to vary widely on re-assessment and this may not reflect change in ability.

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How to cite this document. Hanna SE, Bartlett DJ, Rivard LM, Russell DJ. Tabulated reference percentiles for the 66-item Gross Motor Function Measure for use with children having cerebral palsy, April 2008.

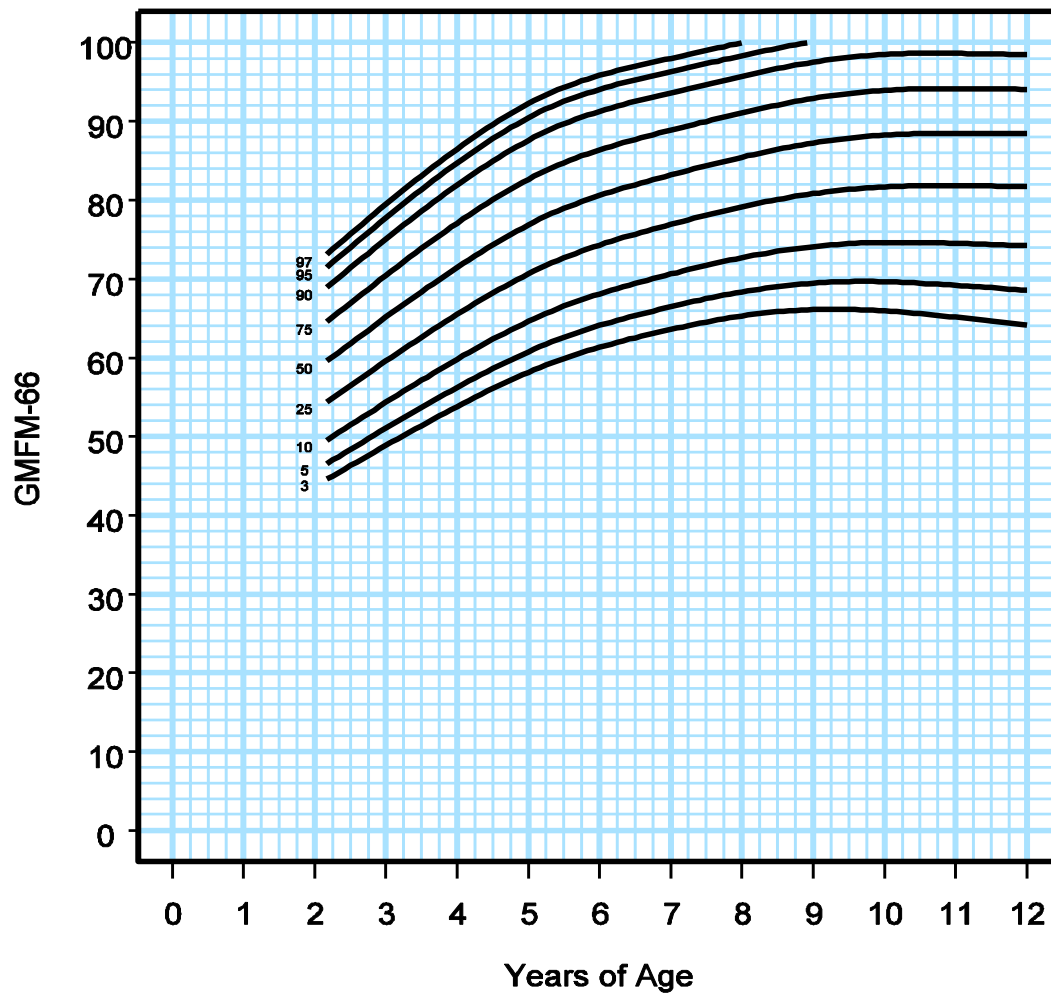
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GMFM-66 Percentiles by Age

GMFCS Level I



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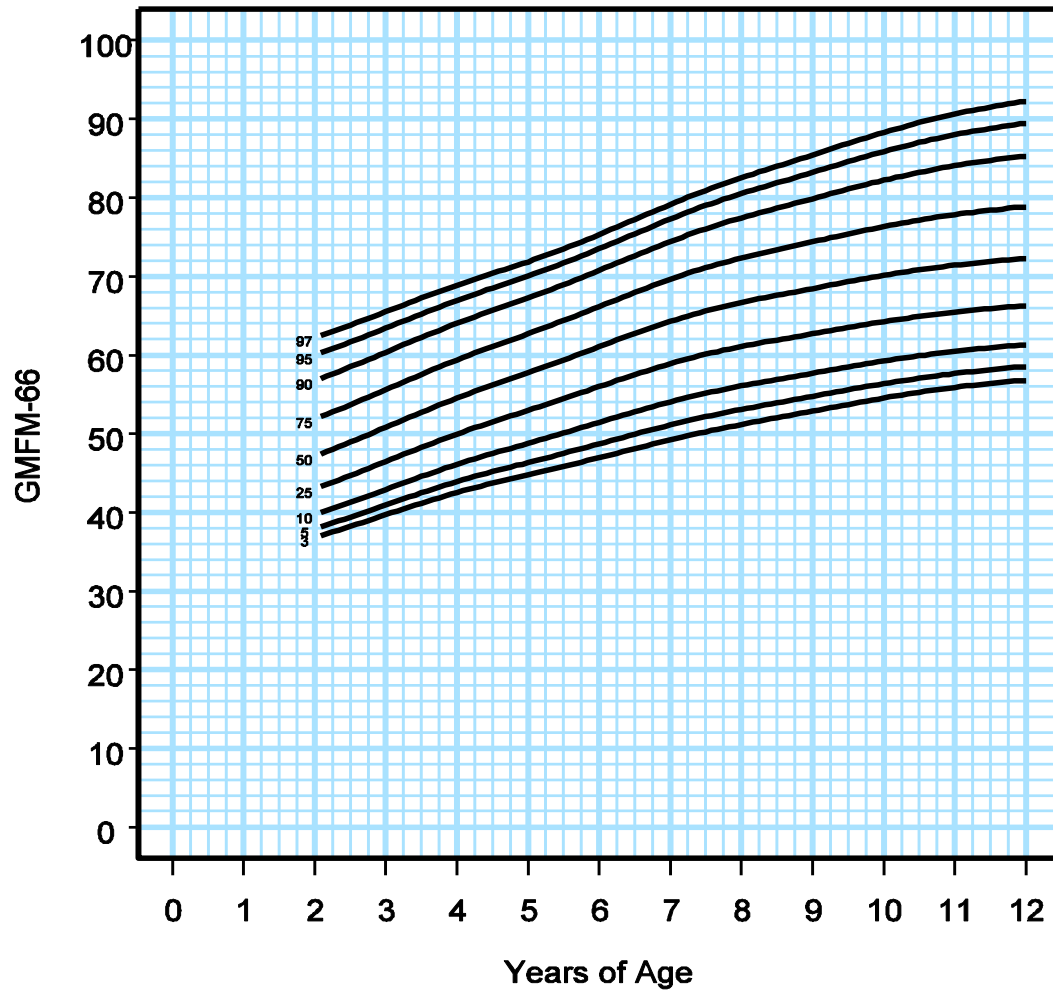
GMFCS Level I

Age		Percentile																				
		3	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	97
2 years	0 mo	44.2	46.2	49.1	51.1	52.6	53.9	55.1	56.2	57.2	58.1	59.1	60.0	61.0	62.0	63.0	64.1	65.3	66.7	68.4	71.0	72.6
	3 mo	45.0	47.0	50.0	52.0	53.6	54.9	56.1	57.2	58.2	59.2	60.1	61.1	62.0	63.0	64.0	65.1	66.4	67.8	69.6	72.1	73.8
	6 mo	46.3	48.4	51.5	53.5	55.1	56.5	57.7	58.8	59.8	60.8	61.8	62.8	63.8	64.8	65.8	66.9	68.2	69.6	71.4	74.0	75.7
	9 mo	47.6	49.7	52.9	55.0	56.6	58.0	59.3	60.4	61.5	62.5	63.5	64.5	65.5	66.5	67.6	68.7	70.0	71.4	73.2	75.9	77.6
3 years	0 mo	48.9	51.0	54.3	56.5	58.1	59.6	60.8	62.0	63.1	64.1	65.1	66.1	67.1	68.2	69.3	70.4	71.7	73.2	75.1	77.7	79.5
	3 mo	50.1	52.4	55.7	57.9	59.6	61.1	62.4	63.5	64.7	65.7	66.7	67.8	68.8	69.9	71.0	72.2	73.5	75.0	76.8	79.6	81.3
	6 mo	51.4	53.7	57.1	59.4	61.1	62.6	63.9	65.1	66.2	67.3	68.4	69.4	70.4	71.5	72.6	73.8	75.2	76.7	78.6	81.3	83.1
	9 mo	52.6	55.0	58.5	60.8	62.6	64.1	65.4	66.6	67.8	68.9	69.9	71.0	72.0	73.1	74.3	75.5	76.8	78.4	80.3	83.0	84.8
4 years	0 mo	53.8	56.2	59.8	62.1	64.0	65.5	66.9	68.1	69.3	70.4	71.5	72.5	73.6	74.7	75.9	77.1	78.4	80.0	81.9	84.7	86.5
	3 mo	55.0	57.4	61.1	63.5	65.3	66.9	68.3	69.5	70.7	71.8	72.9	74.0	75.1	76.2	77.4	78.6	80.0	81.5	83.5	86.3	88.1
	6 mo	56.1	58.6	62.3	64.8	66.6	68.2	69.6	70.9	72.1	73.2	74.3	75.4	76.5	77.6	78.8	80.1	81.4	83.0	85.0	87.8	89.6
	9 mo	57.1	59.7	63.5	66.0	67.9	69.5	70.9	72.2	73.4	74.5	75.6	76.7	77.9	79.0	80.2	81.4	82.8	84.4	86.3	89.2	91.0
5 years	0 mo	58.1	60.8	64.6	67.1	69.0	70.6	72.1	73.4	74.6	75.7	76.9	78.0	79.1	80.2	81.4	82.7	84.1	85.6	87.6	90.4	92.3
	3 mo	59.1	61.7	65.6	68.1	70.1	71.7	73.1	74.4	75.7	76.8	78.0	79.1	80.2	81.3	82.5	83.8	85.2	86.8	88.7	91.6	93.4
	6 mo	59.9	62.6	66.5	69.1	71.0	72.7	74.1	75.4	76.6	77.8	78.9	80.1	81.2	82.3	83.5	84.8	86.1	87.7	89.7	92.5	94.3
	9 mo	60.6	63.4	67.3	69.9	71.9	73.5	75.0	76.3	77.5	78.7	79.8	80.9	82.0	83.2	84.4	85.6	87.0	88.6	90.5	93.3	95.1
6 years	0 mo	61.3	64.1	68.1	70.7	72.7	74.3	75.8	77.1	78.3	79.5	80.6	81.7	82.8	84.0	85.1	86.4	87.8	89.3	91.3	94.1	95.8
	3 mo	61.9	64.7	68.8	71.4	73.4	75.0	76.5	77.8	79.0	80.2	81.3	82.4	83.5	84.7	85.8	87.1	88.4	90.0	91.9	94.7	96.4
	6 mo	62.5	65.3	69.4	72.0	74.0	75.7	77.1	78.4	79.7	80.8	82.0	83.1	84.2	85.3	86.5	87.7	89.1	90.6	92.5	95.3	97.0
	9 mo	63.1	65.9	70.0	72.7	74.6	76.3	77.8	79.1	80.3	81.5	82.6	83.7	84.8	85.9	87.1	88.3	89.6	91.2	93.1	95.8	97.5
7 years	0 mo	63.6	66.5	70.6	73.3	75.3	76.9	78.4	79.7	80.9	82.1	83.2	84.3	85.4	86.5	87.7	88.9	90.2	91.7	93.6	96.3	98.0
	3 mo	64.1	67.0	71.2	73.8	75.8	77.5	79.0	80.3	81.5	82.6	83.8	84.9	86.0	87.1	88.2	89.4	90.8	92.3	94.1	96.8	98.5
	6 mo	64.5	67.5	71.7	74.4	76.4	78.1	79.5	80.8	82.1	83.2	84.3	85.4	86.5	87.6	88.8	90.0	91.3	92.8	94.7	97.3	99.0
	9 mo	64.9	67.9	72.2	74.9	76.9	78.6	80.1	81.4	82.6	83.8	84.9	86.0	87.1	88.2	89.3	90.5	91.9	93.4	95.2	97.8	99.5
8 years	0 mo	65.3	68.4	72.7	75.4	77.5	79.1	80.6	81.9	83.2	84.3	85.4	86.5	87.6	88.7	89.9	91.1	92.4	93.9	95.7	98.3	100
	3 mo	65.6	68.7	73.1	75.9	77.9	79.6	81.1	82.4	83.7	84.8	86.0	87.1	88.1	89.3	90.4	91.6	92.9	94.4	96.2	98.8	100
	6 mo	65.8	69.0	73.5	76.3	78.4	80.1	81.6	82.9	84.1	85.3	86.4	87.5	88.6	89.7	90.9	92.1	93.4	94.9	96.7	99.3	100
	9 mo	66.0	69.3	73.8	76.6	78.7	80.5	82.0	83.3	84.6	85.7	86.9	88.0	89.1	90.2	91.3	92.5	93.8	95.3	97.1	99.7	100
9 years	0 mo	66.1	69.5	74.1	76.9	79.1	80.8	82.3	83.7	84.9	86.1	87.3	88.4	89.5	90.6	91.7	92.9	94.2	95.7	97.5	100	100
	3 mo	66.1	69.6	74.3	77.2	79.4	81.1	82.6	84.0	85.3	86.5	87.6	88.7	89.8	90.9	92.1	93.3	94.6	96.0	97.9	100	100
	6 mo	66.1	69.6	74.5	77.4	79.6	81.4	82.9	84.3	85.5	86.7	87.9	89.0	90.1	91.2	92.3	93.5	94.9	96.3	98.1	100	100
	9 mo	66.1	69.7	74.6	77.5	79.7	81.5	83.1	84.5	85.8	86.9	88.1	89.2	90.3	91.4	92.6	93.8	95.1	96.6	98.3	100	100
10 years	0 mo	65.9	69.6	74.6	77.6	79.9	81.7	83.2	84.6	85.9	87.1	88.3	89.4	90.5	91.6	92.7	93.9	95.2	96.7	98.5	100	100
	3 mo	65.8	69.6	74.6	77.7	79.9	81.8	83.3	84.7	86.0	87.2	88.4	89.5	90.6	91.7	92.8	94.0	95.3	96.8	98.6	100	100
	6 mo	65.6	69.5	74.6	77.7	80.0	81.8	83.4	84.8	86.1	87.3	88.4	89.5	90.7	91.8	92.9	94.1	95.4	96.9	98.6	100	100
	9 mo	65.4	69.3	74.6	77.7	80.0	81.8	83.4	84.8	86.1	87.3	88.5	89.6	90.7	91.8	92.9	94.1	95.4	96.9	98.6	100	100
11 years	0 mo	65.1	69.2	74.5	77.6	80.0	81.8	83.4	84.8	86.1	87.3	88.5	89.6	90.7	91.8	92.9	94.1	95.4	96.9	98.6	100	100
	3 mo	64.9	69.0	74.4	77.6	79.9	81.8	83.4	84.8	86.1	87.3	88.5	89.6	90.7	91.8	92.9	94.1	95.4	96.8	98.6	100	100
	6 mo	64.7	68.9	74.4	77.6	79.9	81.8	83.4	84.8	86.1	87.3	88.5	89.6	90.7	91.8	92.9	94.1	95.4	96.8	98.5	100	100
	9 mo	64.4	68.7	74.3	77.5	79.9	81.8	83.4	84.8	86.1	87.3	88.5	89.6	90.7	91.8	92.9	94.1	95.3	96.8	98.5	100	100
12 years	0 mo	64.1	68.5	74.2	77.5	79.8	81.7	83.3	84.8	86.1	87.3	88.4	89.6	90.7	91.8	92.9	94.1	95.3	96.7	98.5	100	100



GMFM-66 Percentiles by Age

GMFCS Level II



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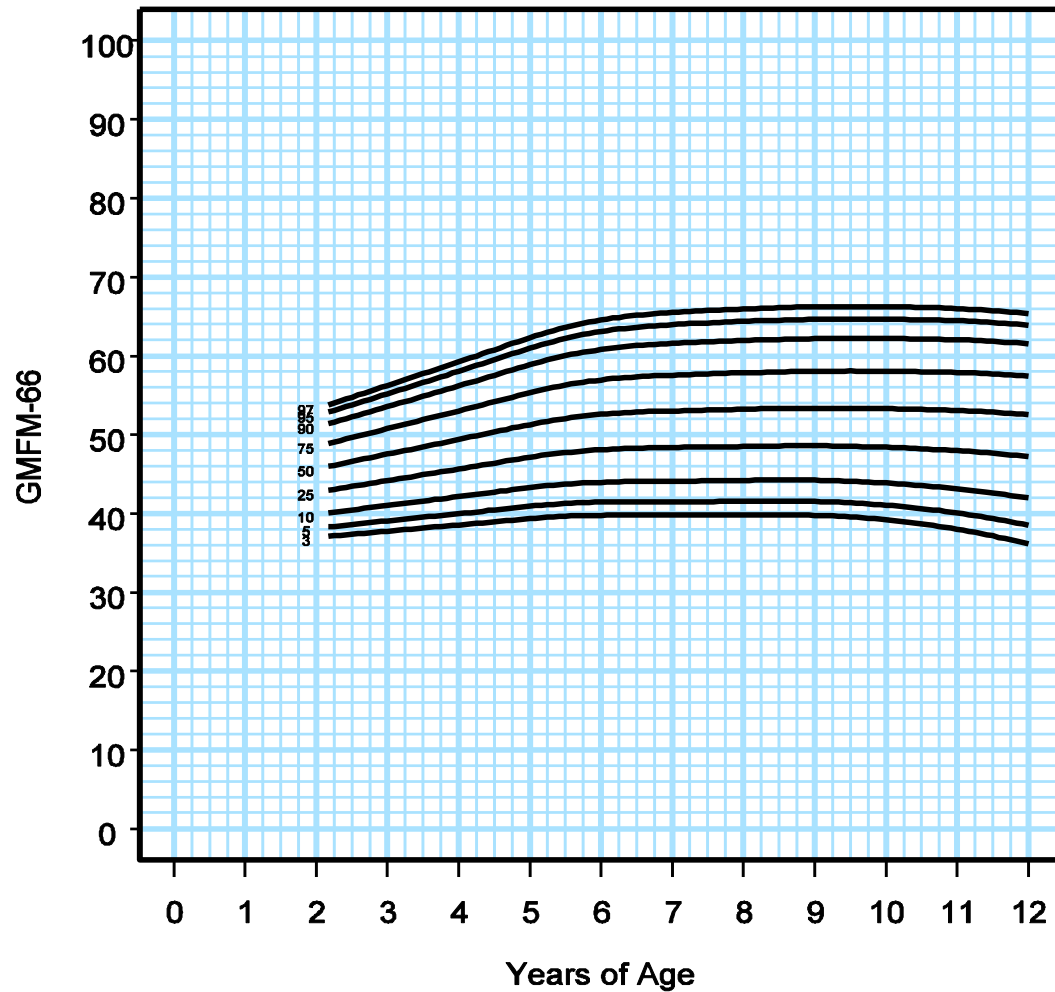
GMFCS Level II

Age		Percentile																				
		3	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	97
2 years	0 mo	36.8	37.9	39.7	41.0	42.0	43.0	43.9	44.7	45.5	46.3	47.1	47.9	48.8	49.7	50.7	51.8	53.1	54.7	56.7	60.0	62.2
	3 mo	37.5	38.6	40.5	41.8	42.9	43.8	44.7	45.6	46.4	47.2	48.0	48.9	49.7	50.7	51.7	52.8	54.0	55.6	57.6	60.8	63.0
	6 mo	38.2	39.4	41.3	42.6	43.7	44.7	45.6	46.4	47.3	48.1	48.9	49.8	50.6	51.6	52.6	53.7	55.0	56.5	58.5	61.6	63.8
	9 mo	39.0	40.2	42.1	43.5	44.6	45.6	46.5	47.4	48.2	49.0	49.9	50.7	51.6	52.5	53.5	54.6	55.9	57.4	59.4	62.5	64.6
3 years	0 mo	39.7	40.9	42.9	44.3	45.5	46.5	47.4	48.3	49.1	50.0	50.8	51.7	52.5	53.5	54.5	55.6	56.9	58.4	60.4	63.4	65.5
	3 mo	40.4	41.7	43.7	45.2	46.3	47.4	48.3	49.2	50.1	50.9	51.7	52.6	53.5	54.4	55.5	56.6	57.8	59.3	61.3	64.3	66.4
	6 mo	41.2	42.5	44.5	46.0	47.2	48.2	49.2	50.1	51.0	51.8	52.7	53.6	54.5	55.4	56.4	57.5	58.8	60.3	62.2	65.2	67.2
	9 mo	41.9	43.2	45.3	46.8	48.0	49.1	50.1	51.0	51.9	52.7	53.6	54.5	55.4	56.3	57.3	58.5	59.7	61.2	63.1	66.1	68.1
4 years	0 mo	42.5	43.9	46.1	47.6	48.9	50.0	50.9	51.9	52.8	53.6	54.5	55.4	56.3	57.2	58.3	59.4	60.6	62.1	64.0	66.9	68.9
	3 mo	43.1	44.6	46.8	48.4	49.6	50.7	51.8	52.7	53.6	54.5	55.4	56.2	57.2	58.1	59.1	60.2	61.5	63.0	64.9	67.7	69.6
	6 mo	43.7	45.2	47.5	49.1	50.4	51.5	52.5	53.5	54.4	55.3	56.2	57.1	58.0	58.9	60.0	61.1	62.3	63.8	65.7	68.5	70.4
	9 mo	44.2	45.8	48.1	49.8	51.1	52.2	53.3	54.2	55.2	56.1	57.0	57.9	58.8	59.8	60.8	61.9	63.1	64.6	66.5	69.3	71.1
5 years	0 mo	44.8	46.3	48.8	50.4	51.8	53.0	54.0	55.0	55.9	56.8	57.8	58.7	59.6	60.6	61.6	62.7	63.9	65.4	67.2	70.0	71.9
	3 mo	45.3	46.9	49.4	51.1	52.5	53.7	54.8	55.8	56.7	57.6	58.6	59.5	60.4	61.4	62.4	63.5	64.8	66.2	68.1	70.8	72.6
	6 mo	45.8	47.5	50.1	51.8	53.2	54.4	55.5	56.5	57.5	58.4	59.4	60.3	61.2	62.2	63.3	64.4	65.6	67.1	68.9	71.7	73.5
	9 mo	46.4	48.1	50.7	52.5	54.0	55.2	56.3	57.3	58.3	59.3	60.2	61.1	62.1	63.1	64.1	65.3	66.5	68.0	69.8	72.6	74.4
6 years	0 mo	46.9	48.7	51.4	53.3	54.7	56.0	57.1	58.2	59.2	60.1	61.1	62.0	63.0	64.0	65.0	66.2	67.4	68.9	70.7	73.5	75.3
	3 mo	47.5	49.3	52.1	54.0	55.5	56.8	57.9	59.0	60.0	60.9	61.9	62.9	63.8	64.8	65.9	67.1	68.3	69.8	71.7	74.5	76.3
	6 mo	48.1	49.9	52.8	54.7	56.2	57.5	58.7	59.7	60.8	61.8	62.7	63.7	64.7	65.7	66.8	67.9	69.2	70.7	72.6	75.4	77.2
	9 mo	48.7	50.5	53.4	55.4	56.9	58.2	59.4	60.5	61.5	62.5	63.5	64.5	65.5	66.5	67.6	68.8	70.1	71.6	73.5	76.4	78.2
7 years	0 mo	49.2	51.1	54.0	56.0	57.6	58.9	60.1	61.2	62.3	63.3	64.3	65.3	66.3	67.3	68.4	69.6	70.9	72.5	74.4	77.3	79.1
	3 mo	49.7	51.7	54.6	56.6	58.2	59.5	60.7	61.9	62.9	64.0	65.0	66.0	67.0	68.1	69.2	70.4	71.7	73.3	75.3	78.2	80.1
	6 mo	50.2	52.2	55.1	57.1	58.7	60.1	61.3	62.4	63.5	64.6	65.6	66.6	67.7	68.7	69.9	71.1	72.4	74.0	76.0	79.0	80.9
	9 mo	50.7	52.6	55.6	57.6	59.2	60.6	61.8	63.0	64.1	65.1	66.2	67.2	68.2	69.3	70.5	71.7	73.1	74.7	76.8	79.8	81.7
8 years	0 mo	51.2	53.1	56.1	58.1	59.7	61.1	62.3	63.5	64.6	65.6	66.7	67.7	68.8	69.9	71.1	72.3	73.7	75.4	77.4	80.5	82.5
	3 mo	51.6	53.5	56.5	58.5	60.1	61.5	62.7	63.9	65.0	66.1	67.1	68.2	69.3	70.4	71.6	72.9	74.3	76.0	78.1	81.2	83.3
	6 mo	52.0	53.9	56.9	58.9	60.5	61.9	63.2	64.3	65.4	66.5	67.6	68.7	69.7	70.9	72.1	73.4	74.8	76.5	78.7	81.9	84.0
	9 mo	52.4	54.3	57.3	59.3	60.9	62.3	63.6	64.7	65.9	66.9	68.0	69.1	70.2	71.3	72.6	73.9	75.4	77.1	79.3	82.5	84.7
9 years	0 mo	52.9	54.7	57.7	59.7	61.3	62.7	64.0	65.1	66.3	67.4	68.4	69.5	70.7	71.8	73.0	74.4	75.9	77.6	79.9	83.2	85.4
	3 mo	53.3	55.2	58.1	60.1	61.7	63.1	64.4	65.6	66.7	67.8	68.9	70.0	71.1	72.3	73.5	74.9	76.4	78.2	80.5	83.9	86.2
	6 mo	53.7	55.6	58.5	60.5	62.1	63.5	64.8	66.0	67.1	68.2	69.3	70.4	71.6	72.8	74.0	75.4	76.9	78.8	81.1	84.6	86.9
	9 mo	54.1	56.0	58.9	60.9	62.5	63.9	65.2	66.4	67.5	68.6	69.7	70.9	72.0	73.2	74.5	75.9	77.5	79.3	81.7	85.3	87.6
10 years	0 mo	54.5	56.4	59.2	61.2	62.8	64.2	65.5	66.7	67.9	69.0	70.1	71.3	72.4	73.6	74.9	76.3	77.9	79.8	82.2	85.9	88.3
	3 mo	54.9	56.7	59.6	61.6	63.2	64.6	65.9	67.1	68.2	69.4	70.5	71.6	72.8	74.0	75.3	76.8	78.4	80.3	82.7	86.5	88.9
	6 mo	55.3	57.1	59.9	61.9	63.5	64.9	66.2	67.4	68.5	69.7	70.8	72.0	73.1	74.4	75.7	77.1	78.8	80.7	83.2	87.0	89.6
	9 mo	55.6	57.4	60.2	62.2	63.8	65.2	66.5	67.7	68.9	70.0	71.1	72.3	73.5	74.7	76.1	77.5	79.2	81.1	83.7	87.5	90.1
11 years	0 mo	55.9	57.7	60.5	62.4	64.1	65.5	66.7	68.0	69.1	70.3	71.4	72.6	73.8	75.0	76.4	77.9	79.5	81.5	84.1	88.0	90.6
	3 mo	56.1	57.9	60.7	62.7	64.3	65.7	67.0	68.2	69.4	70.5	71.7	72.8	74.0	75.3	76.7	78.1	79.8	81.8	84.4	88.4	91.1
	6 mo	56.4	58.1	60.9	62.9	64.5	65.9	67.2	68.4	69.6	70.7	71.9	73.1	74.3	75.5	76.9	78.4	80.1	82.1	84.8	88.8	91.5
	9 mo	56.6	58.3	61.1	63.1	64.7	66.1	67.4	68.6	69.8	70.9	72.1	73.3	74.5	75.8	77.1	78.6	80.4	82.4	85.1	89.2	91.9
12 years	0 mo	56.7	58.5	61.3	63.2	64.8	66.2	67.5	68.7	69.9	71.1	72.2	73.4	74.6	75.9	77.3	78.8	80.5	82.6	85.3	89.4	92.2



GMFM-66 Percentiles by Age

GMFCS Level III



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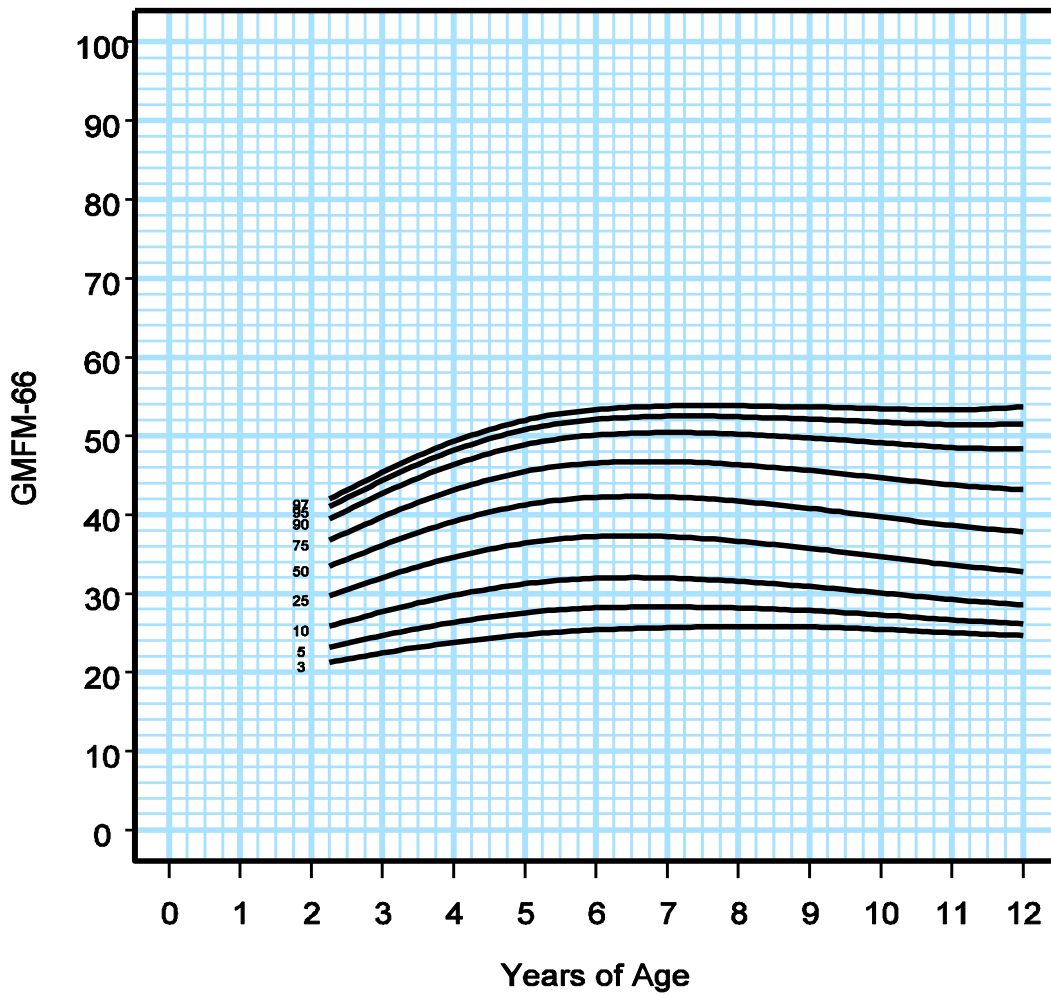
GMFCS Level III

Age		Percentile																				
		3	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	97
2 years	0 mo	37.0	38.2	40.0	41.1	42.1	42.8	43.5	44.1	44.7	45.3	45.8	46.4	46.9	47.5	48.1	48.7	49.4	50.2	51.2	52.7	53.6
	3 mo	37.1	38.4	40.2	41.3	42.3	43.1	43.8	44.4	45.0	45.6	46.1	46.7	47.2	47.8	48.4	49.1	49.8	50.6	51.6	53.1	54.0
	6 mo	37.4	38.6	40.5	41.7	42.6	43.4	44.2	44.8	45.4	46.0	46.6	47.2	47.8	48.3	49.0	49.6	50.4	51.2	52.3	53.8	54.8
	9 mo	37.6	38.8	40.7	42.0	43.0	43.8	44.5	45.2	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.2	50.9	51.8	52.9	54.5	55.5
3 years	0 mo	37.8	39.1	41.0	42.3	43.3	44.2	44.9	45.6	46.3	46.9	47.5	48.1	48.8	49.4	50.0	50.8	51.5	52.4	53.6	55.2	56.2
	3 mo	37.9	39.3	41.3	42.6	43.7	44.5	45.3	46.0	46.7	47.4	48.0	48.6	49.3	49.9	50.6	51.3	52.1	53.0	54.2	55.9	57.0
	6 mo	38.1	39.5	41.6	42.9	44.0	44.9	45.7	46.4	47.1	47.8	48.5	49.1	49.8	50.4	51.1	51.9	52.7	53.7	54.9	56.6	57.7
	9 mo	38.3	39.7	41.8	43.2	44.3	45.3	46.1	46.8	47.6	48.2	48.9	49.6	50.3	50.9	51.7	52.4	53.3	54.3	55.5	57.3	58.5
4 years	0 mo	38.5	40.0	42.1	43.6	44.7	45.6	46.5	47.3	48.0	48.7	49.4	50.1	50.8	51.5	52.2	53.0	53.9	54.9	56.2	58.0	59.2
	3 mo	38.7	40.2	42.4	43.9	45.0	46.0	46.9	47.7	48.4	49.2	49.9	50.6	51.3	52.0	52.8	53.6	54.5	55.5	56.9	58.8	60.0
	6 mo	38.9	40.4	42.7	44.2	45.4	46.4	47.3	48.1	48.9	49.6	50.3	51.1	51.8	52.5	53.3	54.2	55.1	56.2	57.5	59.5	60.8
	9 mo	39.2	40.7	43.0	44.5	45.7	46.8	47.7	48.5	49.3	50.1	50.8	51.6	52.3	53.1	53.9	54.8	55.7	56.8	58.2	60.2	61.6
5 years	0 mo	39.3	40.9	43.3	44.8	46.1	47.1	48.1	48.9	49.7	50.5	51.3	52.0	52.8	53.6	54.4	55.3	56.3	57.5	58.9	61.0	62.3
	3 mo	39.5	41.1	43.5	45.1	46.4	47.5	48.4	49.3	50.1	50.9	51.7	52.5	53.3	54.1	54.9	55.8	56.8	58.0	59.5	61.6	63.0
	6 mo	39.6	41.3	43.7	45.3	46.6	47.7	48.7	49.6	50.4	51.3	52.1	52.9	53.7	54.5	55.4	56.3	57.3	58.5	60.0	62.2	63.6
	9 mo	39.7	41.4	43.9	45.5	46.8	47.9	48.9	49.8	50.7	51.5	52.3	53.1	54.0	54.8	55.7	56.6	57.7	58.9	60.4	62.7	64.1
6 years	0 mo	39.8	41.4	44.0	45.6	47.0	48.1	49.1	50.0	50.9	51.7	52.6	53.4	54.2	55.1	56.0	56.9	58.0	59.3	60.8	63.1	64.5
	3 mo	39.8	41.5	44.0	45.7	47.1	48.2	49.2	50.2	51.0	51.9	52.7	53.6	54.4	55.3	56.2	57.2	58.3	59.5	61.1	63.4	64.9
	6 mo	39.8	41.5	44.1	45.8	47.1	48.3	49.3	50.3	51.2	52.0	52.9	53.7	54.6	55.4	56.4	57.3	58.4	59.7	61.3	63.6	65.1
	9 mo	39.8	41.5	44.1	45.8	47.2	48.3	49.4	50.3	51.2	52.1	52.9	53.8	54.6	55.5	56.5	57.5	58.6	59.8	61.5	63.8	65.3
7 years	0 mo	39.8	41.5	44.1	45.8	47.2	48.4	49.4	50.4	51.3	52.1	53.0	53.9	54.7	55.6	56.6	57.6	58.7	60.0	61.6	64.0	65.5
	3 mo	39.8	41.5	44.1	45.9	47.2	48.4	49.4	50.4	51.3	52.2	53.1	53.9	54.8	55.7	56.6	57.6	58.8	60.1	61.7	64.1	65.6
	6 mo	39.8	41.5	44.1	45.9	47.3	48.4	49.5	50.4	51.4	52.2	53.1	54.0	54.8	55.7	56.7	57.7	58.8	60.1	61.8	64.2	65.7
	9 mo	39.8	41.5	44.2	45.9	47.3	48.5	49.5	50.5	51.4	52.3	53.2	54.0	54.9	55.8	56.8	57.8	58.9	60.2	61.9	64.3	65.8
8 years	0 mo	39.8	41.6	44.2	45.9	47.3	48.5	49.6	50.5	51.5	52.3	53.2	54.1	55.0	55.9	56.8	57.8	59.0	60.3	61.9	64.4	65.9
	3 mo	39.8	41.6	44.2	46.0	47.4	48.5	49.6	50.6	51.5	52.4	53.3	54.1	55.0	55.9	56.9	57.9	59.0	60.4	62.0	64.5	66.0
	6 mo	39.8	41.6	44.2	46.0	47.4	48.6	49.6	50.6	51.5	52.4	53.3	54.2	55.1	56.0	56.9	58.0	59.1	60.4	62.1	64.5	66.1
	9 mo	39.8	41.6	44.2	46.0	47.4	48.6	49.6	50.6	51.6	52.5	53.3	54.2	55.1	56.0	57.0	58.0	59.1	60.5	62.1	64.6	66.2
9 years	0 mo	39.8	41.5	44.2	46.0	47.4	48.6	49.7	50.6	51.6	52.5	53.4	54.2	55.1	56.0	57.0	58.0	59.2	60.5	62.2	64.6	66.2
	3 mo	39.7	41.5	44.2	45.9	47.4	48.6	49.6	50.6	51.6	52.5	53.4	54.2	55.1	56.1	57.0	58.1	59.2	60.5	62.2	64.7	66.2
	6 mo	39.6	41.4	44.1	45.9	47.3	48.5	49.6	50.6	51.6	52.5	53.4	54.2	55.1	56.1	57.0	58.1	59.2	60.6	62.2	64.7	66.3
	9 mo	39.4	41.2	44.0	45.8	47.2	48.5	49.6	50.6	51.5	52.4	53.3	54.2	55.1	56.0	57.0	58.1	59.2	60.6	62.2	64.7	66.2
10 years	0 mo	39.2	41.1	43.8	45.7	47.2	48.4	49.5	50.5	51.5	52.4	53.3	54.2	55.1	56.0	57.0	58.0	59.2	60.5	62.2	64.7	66.2
	3 mo	39.0	40.9	43.7	45.6	47.1	48.3	49.4	50.4	51.4	52.3	53.2	54.1	55.1	56.0	57.0	58.0	59.2	60.5	62.2	64.6	66.2
	6 mo	38.7	40.6	43.5	45.4	46.9	48.2	49.3	50.4	51.4	52.3	53.2	54.1	55.0	56.0	56.9	58.0	59.1	60.5	62.2	64.6	66.1
	9 mo	38.4	40.4	43.3	45.3	46.8	48.1	49.2	50.3	51.3	52.2	53.1	54.1	55.0	55.9	56.9	57.9	59.1	60.4	62.1	64.5	66.1
11 years	0 mo	38.0	40.1	43.1	45.1	46.7	48.0	49.1	50.2	51.2	52.1	53.1	54.0	54.9	55.9	56.8	57.9	59.1	60.4	62.1	64.5	66.0
	3 mo	37.6	39.7	42.9	44.9	46.5	47.8	49.0	50.1	51.1	52.0	53.0	53.9	54.8	55.8	56.8	57.8	59.0	60.3	62.0	64.4	65.9
	6 mo	37.1	39.4	42.6	44.7	46.3	47.6	48.8	49.9	50.9	51.9	52.8	53.8	54.7	55.7	56.6	57.7	58.9	60.2	61.8	64.2	65.7
	9 mo	36.6	38.9	42.3	44.4	46.1	47.4	48.7	49.8	50.8	51.8	52.7	53.6	54.6	55.5	56.5	57.6	58.7	60.1	61.7	64.1	65.6
12 years	0 mo	36.1	38.5	42.0	44.2	45.8	47.2	48.5	49.6	50.6	51.6	52.6	53.5	54.4	55.4	56.4	57.4	58.6	59.9	61.5	63.9	65.4



GMFM-66 Percentiles by Age

GMFCS Level IV



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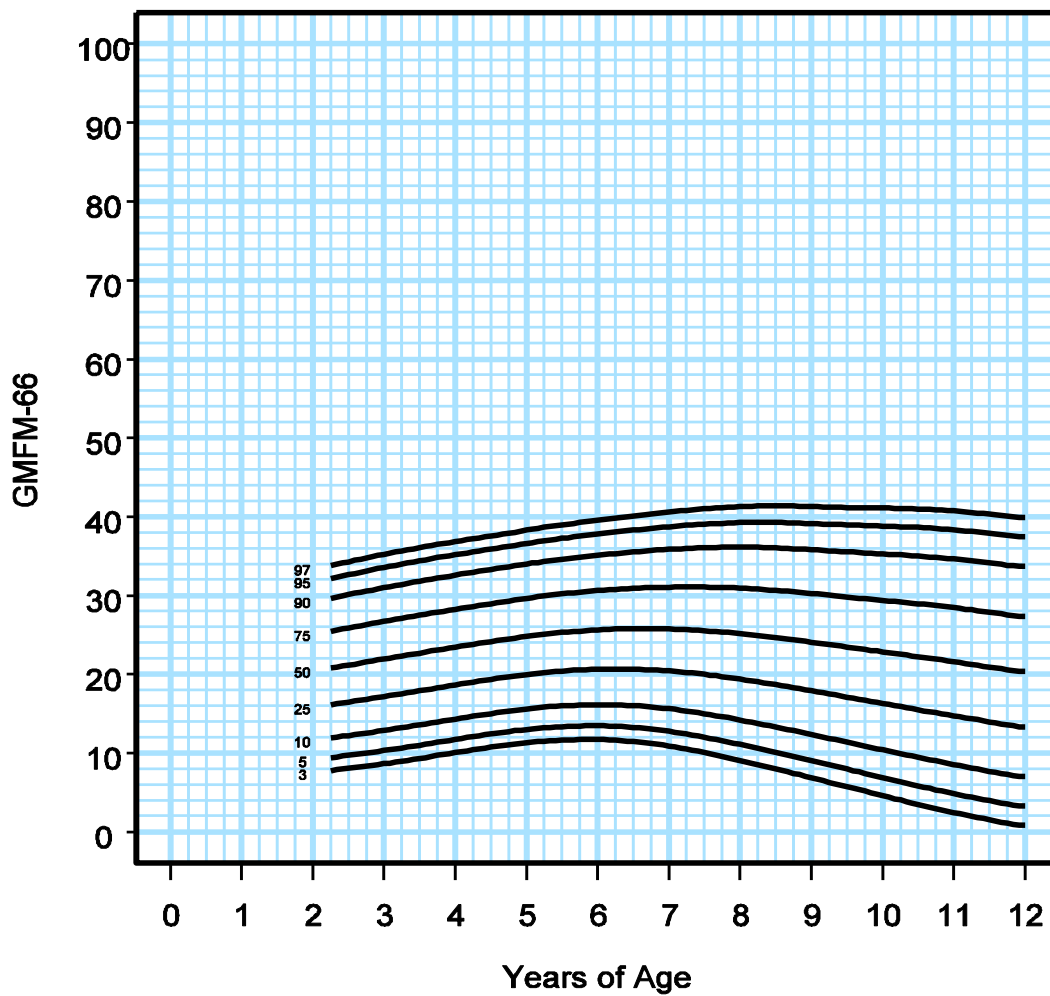
GMFCS Level IV

Age		Percentile																				
		3	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	97
2 years	0 mo	21.2	23.1	25.7	27.4	28.6	29.6	30.4	31.2	31.9	32.6	33.3	33.9	34.6	35.2	35.9	36.6	37.3	38.2	39.3	40.8	41.7
	3 mo	21.2	23.2	25.9	27.5	28.7	29.7	30.6	31.4	32.1	32.8	33.5	34.1	34.7	35.4	36.1	36.8	37.5	38.4	39.5	41.0	42.0
	6 mo	21.7	23.7	26.5	28.2	29.4	30.5	31.4	32.2	33.0	33.7	34.3	35.0	35.7	36.3	37.0	37.8	38.5	39.5	40.6	42.1	43.1
	9 mo	22.1	24.2	27.1	28.8	30.2	31.2	32.2	33.0	33.8	34.5	35.2	35.9	36.6	37.3	38.0	38.7	39.6	40.5	41.6	43.2	44.2
3 years	0 mo	22.4	24.7	27.7	29.5	30.9	32.0	32.9	33.8	34.6	35.4	36.1	36.8	37.5	38.2	38.9	39.7	40.5	41.5	42.7	44.3	45.4
	3 mo	22.8	25.1	28.2	30.1	31.5	32.7	33.7	34.6	35.4	36.2	36.9	37.7	38.4	39.1	39.9	40.7	41.5	42.5	43.7	45.4	46.5
	6 mo	23.2	25.5	28.8	30.7	32.2	33.4	34.4	35.3	36.2	37.0	37.7	38.5	39.2	40.0	40.7	41.5	42.4	43.4	44.6	46.4	47.5
	9 mo	23.5	25.9	29.3	31.3	32.8	34.0	35.1	36.0	36.9	37.7	38.5	39.2	40.0	40.7	41.5	42.4	43.3	44.3	45.5	47.3	48.4
4 years	0 mo	23.8	26.3	29.7	31.8	33.3	34.6	35.7	36.6	37.5	38.3	39.1	39.9	40.7	41.5	42.3	43.1	44.0	45.1	46.3	48.2	49.3
	3 mo	24.0	26.7	30.2	32.3	33.8	35.1	36.2	37.2	38.1	38.9	39.8	40.5	41.3	42.1	42.9	43.8	44.7	45.8	47.1	48.9	50.1
	6 mo	24.3	27.0	30.6	32.7	34.3	35.6	36.7	37.7	38.6	39.5	40.3	41.1	41.9	42.7	43.5	44.4	45.4	46.4	47.8	49.6	50.8
	9 mo	24.5	27.3	30.9	33.1	34.7	36.0	37.2	38.2	39.1	40.0	40.8	41.6	42.4	43.3	44.1	45.0	45.9	47.0	48.4	50.2	51.4
5 years	0 mo	24.8	27.5	31.2	33.4	35.1	36.4	37.5	38.6	39.5	40.4	41.2	42.1	42.9	43.7	44.6	45.5	46.4	47.5	48.9	50.8	52.0
	3 mo	25.0	27.8	31.5	33.7	35.4	36.7	37.9	38.9	39.8	40.7	41.6	42.4	43.2	44.1	44.9	45.8	46.8	47.9	49.3	51.2	52.4
	6 mo	25.1	27.9	31.7	33.9	35.6	36.9	38.1	39.1	40.1	41.0	41.9	42.7	43.5	44.4	45.2	46.2	47.1	48.3	49.6	51.6	52.8
	9 mo	25.3	28.1	31.8	34.1	35.7	37.1	38.3	39.3	40.3	41.2	42.1	42.9	43.7	44.6	45.5	46.4	47.4	48.5	49.9	51.9	53.1
6 years	0 mo	25.4	28.2	31.9	34.2	35.8	37.2	38.4	39.4	40.4	41.3	42.2	43.0	43.9	44.7	45.6	46.6	47.6	48.7	50.1	52.1	53.3
	3 mo	25.5	28.2	32.0	34.2	35.9	37.3	38.4	39.5	40.5	41.4	42.3	43.1	44.0	44.8	45.7	46.7	47.7	48.8	50.2	52.2	53.5
	6 mo	25.5	28.3	32.0	34.2	35.9	37.3	38.5	39.5	40.5	41.4	42.3	43.2	44.0	44.9	45.8	46.7	47.8	48.9	50.3	52.4	53.6
	9 mo	25.6	28.3	32.0	34.2	35.9	37.3	38.4	39.5	40.5	41.4	42.3	43.2	44.0	44.9	45.8	46.8	47.8	49.0	50.4	52.4	53.7
7 years	0 mo	25.7	28.3	31.9	34.2	35.8	37.2	38.4	39.5	40.4	41.4	42.3	43.1	44.0	44.9	45.8	46.7	47.8	49.0	50.4	52.5	53.8
	3 mo	25.7	28.3	31.9	34.1	35.7	37.1	38.3	39.4	40.3	41.3	42.2	43.0	43.9	44.8	45.7	46.7	47.7	48.9	50.4	52.5	53.8
	6 mo	25.7	28.3	31.8	34.0	35.6	37.0	38.2	39.2	40.2	41.1	42.0	42.9	43.8	44.7	45.6	46.6	47.7	48.9	50.4	52.5	53.9
	9 mo	25.8	28.2	31.7	33.8	35.5	36.8	38.0	39.1	40.1	41.0	41.9	42.8	43.7	44.6	45.5	46.5	47.6	48.8	50.3	52.5	53.8
8 years	0 mo	25.8	28.2	31.5	33.7	35.3	36.6	37.8	38.9	39.9	40.8	41.7	42.6	43.5	44.4	45.3	46.3	47.4	48.7	50.2	52.4	53.8
	3 mo	25.8	28.1	31.4	33.5	35.1	36.4	37.6	38.7	39.6	40.6	41.5	42.4	43.3	44.2	45.2	46.2	47.3	48.5	50.1	52.4	53.8
	6 mo	25.8	28.0	31.2	33.3	34.9	36.2	37.4	38.4	39.4	40.4	41.3	42.2	43.1	44.0	45.0	46.0	47.1	48.4	50.0	52.3	53.7
	9 mo	25.8	27.9	31.1	33.1	34.7	36.0	37.1	38.2	39.2	40.1	41.0	41.9	42.9	43.8	44.8	45.8	46.9	48.2	49.9	52.2	53.7
9 years	0 mo	25.7	27.8	30.9	32.9	34.4	35.7	36.9	37.9	38.9	39.9	40.8	41.7	42.6	43.6	44.5	45.6	46.8	48.1	49.7	52.1	53.7
	3 mo	25.7	27.7	30.7	32.7	34.2	35.5	36.6	37.7	38.7	39.6	40.5	41.5	42.4	43.3	44.3	45.4	46.6	47.9	49.6	52.0	53.6
	6 mo	25.6	27.6	30.5	32.4	33.9	35.2	36.4	37.4	38.4	39.3	40.3	41.2	42.1	43.1	44.1	45.2	46.4	47.7	49.4	52.0	53.6
	9 mo	25.5	27.4	30.3	32.2	33.7	34.9	36.1	37.1	38.1	39.1	40.0	40.9	41.9	42.8	43.8	44.9	46.1	47.5	49.3	51.9	53.5
10 years	0 mo	25.4	27.3	30.1	31.9	33.4	34.7	35.8	36.8	37.8	38.8	39.7	40.6	41.6	42.6	43.6	44.7	45.9	47.3	49.1	51.8	53.5
	3 mo	25.3	27.1	29.8	31.7	33.1	34.4	35.5	36.6	37.5	38.5	39.4	40.4	41.3	42.3	43.3	44.5	45.7	47.1	49.0	51.7	53.4
	6 mo	25.2	27.0	29.6	31.4	32.9	34.1	35.2	36.3	37.3	38.2	39.1	40.1	41.0	42.0	43.1	44.2	45.5	46.9	48.8	51.6	53.4
	9 mo	25.1	26.8	29.4	31.2	32.6	33.8	35.0	36.0	37.0	37.9	38.9	39.8	40.8	41.8	42.8	44.0	45.3	46.8	48.6	51.5	53.3
11 years	0 mo	25.0	26.6	29.2	31.0	32.4	33.6	34.7	35.7	36.7	37.7	38.6	39.6	40.5	41.5	42.6	43.8	45.1	46.6	48.5	51.4	53.3
	3 mo	24.9	26.5	29.0	30.8	32.2	33.4	34.5	35.5	36.5	37.4	38.4	39.3	40.3	41.3	42.4	43.6	44.9	46.5	48.4	51.4	53.4
	6 mo	24.8	26.4	28.9	30.6	32.0	33.2	34.3	35.3	36.3	37.2	38.2	39.1	40.1	41.2	42.3	43.4	44.8	46.4	48.4	51.4	53.4
	9 mo	24.7	26.3	28.7	30.4	31.8	33.0	34.1	35.1	36.1	37.0	38.0	39.0	39.9	41.0	42.1	43.3	44.7	46.3	48.3	51.5	53.5
12 years	0 mo	24.7	26.2	28.6	30.2	31.6	32.8	33.9	34.9	35.9	36.8	37.8	38.8	39.8	40.8	41.9	43.2	44.6	46.2	48.3	51.5	53.7



GMFM-66 Percentiles by Age

GMFCS Level V



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GMFCS Level V

Age		Percentile																				
		3	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	97
2 years	0 mo	7.7	9.3	11.9	13.5	14.9	16.0	17.1	18.0	19.0	19.8	20.7	21.6	22.4	23.4	24.3	25.4	26.5	27.9	29.5	32.1	33.7
	3 mo	7.8	9.4	11.9	13.6	15.0	16.1	17.2	18.1	19.0	19.9	20.8	21.6	22.5	23.4	24.4	25.4	26.6	27.9	29.6	32.2	33.8
	6 mo	8.0	9.7	12.2	13.9	15.3	16.5	17.5	18.5	19.4	20.3	21.2	22.0	22.9	23.8	24.8	25.9	27.0	28.4	30.1	32.6	34.3
	9 mo	8.3	10.0	12.5	14.3	15.6	16.8	17.9	18.8	19.8	20.7	21.5	22.4	23.3	24.3	25.2	26.3	27.5	28.8	30.5	33.1	34.8
3 years	0 mo	8.6	10.3	12.9	14.6	16.0	17.2	18.2	19.2	20.1	21.0	21.9	22.8	23.7	24.7	25.6	26.7	27.9	29.3	31.0	33.6	35.2
	3 mo	9.0	10.6	13.2	15.0	16.3	17.5	18.6	19.6	20.5	21.4	22.3	23.2	24.1	25.0	26.0	27.1	28.3	29.7	31.4	34.0	35.7
	6 mo	9.3	11.0	13.6	15.3	16.7	17.9	19.0	19.9	20.9	21.8	22.7	23.6	24.5	25.4	26.4	27.5	28.7	30.1	31.8	34.4	36.1
	9 mo	9.7	11.4	13.9	15.7	17.1	18.3	19.3	20.3	21.3	22.2	23.1	24.0	24.9	25.8	26.8	27.9	29.1	30.4	32.2	34.8	36.5
4 years	0 mo	10.0	11.7	14.3	16.1	17.4	18.6	19.7	20.7	21.6	22.5	23.4	24.3	25.2	26.2	27.2	28.2	29.4	30.8	32.6	35.2	36.8
	3 mo	10.4	12.1	14.7	16.4	17.8	19.0	20.1	21.1	22.0	22.9	23.8	24.7	25.6	26.5	27.5	28.6	29.8	31.2	32.9	35.5	37.2
	6 mo	10.7	12.4	15.0	16.8	18.1	19.3	20.4	21.4	22.3	23.3	24.1	25.0	26.0	26.9	27.9	29.0	30.1	31.5	33.3	35.9	37.6
	9 mo	11.0	12.7	15.3	17.1	18.5	19.7	20.7	21.7	22.7	23.6	24.5	25.4	26.3	27.2	28.2	29.3	30.5	31.9	33.6	36.2	37.9
5 years	0 mo	11.3	13.0	15.6	17.4	18.7	19.9	21.0	22.0	23.0	23.9	24.8	25.7	26.6	27.5	28.5	29.6	30.8	32.2	34.0	36.6	38.3
	3 mo	11.5	13.2	15.8	17.6	19.0	20.2	21.3	22.3	23.2	24.2	25.1	26.0	26.9	27.8	28.8	29.9	31.1	32.5	34.3	36.9	38.6
	6 mo	11.6	13.3	16.0	17.8	19.2	20.4	21.5	22.5	23.4	24.4	25.3	26.2	27.1	28.1	29.1	30.2	31.4	32.8	34.6	37.2	39.0
	9 mo	11.7	13.4	16.1	17.9	19.3	20.5	21.6	22.7	23.6	24.6	25.5	26.4	27.3	28.3	29.3	30.4	31.6	33.1	34.9	37.5	39.3
6 years	0 mo	11.7	13.5	16.1	18.0	19.4	20.6	21.7	22.8	23.7	24.7	25.6	26.6	27.5	28.5	29.5	30.6	31.9	33.3	35.1	37.8	39.5
	3 mo	11.6	13.4	16.1	18.0	19.4	20.7	21.8	22.8	23.8	24.8	25.7	26.7	27.6	28.6	29.6	30.8	32.0	33.5	35.3	38.0	39.8
	6 mo	11.5	13.3	16.0	17.9	19.4	20.6	21.8	22.8	23.8	24.8	25.8	26.7	27.7	28.7	29.8	30.9	32.2	33.7	35.5	38.3	40.1
	9 mo	11.2	13.0	15.8	17.7	19.3	20.5	21.7	22.8	23.8	24.8	25.8	26.7	27.7	28.8	29.8	31.0	32.3	33.8	35.7	38.5	40.3
7 years	0 mo	10.9	12.8	15.6	17.6	19.1	20.4	21.6	22.7	23.7	24.7	25.7	26.7	27.7	28.8	29.9	31.1	32.4	33.9	35.9	38.7	40.6
	3 mo	10.5	12.4	15.3	17.3	18.9	20.2	21.4	22.5	23.6	24.6	25.7	26.7	27.7	28.8	29.9	31.1	32.4	34.0	36.0	38.9	40.8
	6 mo	10.1	12.0	15.0	17.0	18.6	20.0	21.2	22.4	23.4	24.5	25.5	26.6	27.6	28.7	29.8	31.1	32.4	34.0	36.1	39.0	41.0
	9 mo	9.6	11.6	14.6	16.7	18.3	19.7	21.0	22.1	23.2	24.3	25.4	26.4	27.5	28.6	29.8	31.0	32.4	34.1	36.1	39.2	41.1
8 years	0 mo	9.1	11.1	14.2	16.3	18.0	19.4	20.7	21.9	23.0	24.1	25.2	26.2	27.3	28.5	29.7	30.9	32.4	34.0	36.1	39.2	41.3
	3 mo	8.5	10.6	13.7	15.9	17.6	19.0	20.4	21.6	22.7	23.8	24.9	26.0	27.1	28.3	29.5	30.8	32.3	34.0	36.1	39.3	41.3
	6 mo	8.0	10.1	13.3	15.5	17.2	18.7	20.0	21.2	22.4	23.5	24.7	25.8	26.9	28.1	29.3	30.7	32.1	33.9	36.0	39.3	41.4
	9 mo	7.4	9.5	12.8	15.0	16.8	18.3	19.6	20.9	22.1	23.2	24.4	25.5	26.7	27.9	29.1	30.5	32.0	33.7	35.9	39.2	41.3
9 years	0 mo	6.9	9.0	12.3	14.6	16.4	17.9	19.3	20.5	21.8	22.9	24.1	25.2	26.4	27.6	28.9	30.2	31.8	33.6	35.8	39.1	41.3
	3 mo	6.3	8.5	11.9	14.1	15.9	17.5	18.9	20.2	21.4	22.6	23.8	24.9	26.1	27.3	28.6	30.0	31.6	33.4	35.7	39.0	41.2
	6 mo	5.7	7.9	11.4	13.7	15.5	17.1	18.5	19.8	21.1	22.3	23.4	24.6	25.8	27.1	28.4	29.8	31.4	33.2	35.5	38.9	41.2
	9 mo	5.1	7.4	10.9	13.2	15.1	16.7	18.1	19.5	20.7	21.9	23.1	24.3	25.6	26.8	28.2	29.6	31.2	33.1	35.4	38.9	41.1
10 years	0 mo	4.6	6.9	10.4	12.8	14.7	16.3	17.7	19.1	20.4	21.6	22.8	24.1	25.3	26.6	27.9	29.4	31.0	32.9	35.3	38.8	41.1
	3 mo	4.0	6.3	9.9	12.3	14.2	15.9	17.4	18.7	20.0	21.3	22.5	23.8	25.0	26.3	27.7	29.2	30.8	32.7	35.1	38.7	41.0
	6 mo	3.5	5.8	9.4	11.9	13.8	15.5	17.0	18.4	19.7	21.0	22.2	23.5	24.7	26.1	27.4	28.9	30.6	32.6	35.0	38.6	41.0
	9 mo	2.9	5.3	9.0	11.5	13.4	15.1	16.6	18.0	19.4	20.6	21.9	23.2	24.5	25.8	27.2	28.7	30.4	32.4	34.8	38.5	40.9
11 years	0 mo	2.4	4.8	8.5	11.0	13.0	14.7	16.2	17.7	19.0	20.3	21.6	22.9	24.2	25.5	26.9	28.4	30.1	32.1	34.6	38.3	40.7
	3 mo	2.0	4.4	8.1	10.6	12.6	14.3	15.9	17.3	18.7	20.0	21.2	22.5	23.8	25.2	26.6	28.2	29.9	31.9	34.4	38.1	40.5
	6 mo	1.5	3.9	7.7	10.2	12.2	14.0	15.5	16.9	18.3	19.6	20.9	22.2	23.5	24.9	26.3	27.9	29.6	31.6	34.1	37.9	40.3
	9 mo	1.1	3.5	7.3	9.8	11.8	13.6	15.1	16.6	17.9	19.3	20.6	21.9	23.2	24.6	26.0	27.5	29.3	31.3	33.8	37.6	40.1
12 years	0 mo	0.8	3.3	7.0	9.6	11.6	13.3	14.9	16.3	17.7	19.0	20.4	21.7	23.0	24.4	25.8	27.4	29.1	31.1	33.7	37.4	39.9

