

## **Indicative Anthropometric Data**

The detailed anthropometric body segment data is based on that collected in two US reports: Snyder, R. G., L. W. Schneider, et al. (1977). Anthropometry of infants, children, and youths to age 18 for product safety design, Highway Safety Research Institute, University of Michigan 638. Snyder, R. G., M. L. Spencer, et al. (1975). Physical characteristics of children as related to death & injury for consumer product safety design, University of Michigan.

In addition, population heights and weights are based on CDC. (2000). "Clinical Growth Charts." [http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical\\_charts.htm](http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/clinical_charts.htm).

Note that in some cases, data has been interpolated between age categories in the original data for consistency.

### Weight (kg) – CDC (2000) BOYS

Age	Percentile		
	5%	50%	95%
6 months	5.9	7.55	9.5
4th birthday	13	16	20
6th birthday	17	20.5	27
8th birthday	20	25.5	35
10th birthday	24.5	32.5	46

### Seated shoulder height (cm) Snyder at al, 1975

	Percentile		
	5%	50%	95%
6 months	24.5	29.0	33.4
4th birthday	31.7	35.3	38.7
6th birthday	35.1	39.1	43.5
8th birthday	39.2	43.1	47.3
10th birthday	42.7	46.6	50.9

### Seated Eye height (cm) Snyder at al, 1977

	Percentile		
	5%	50%	95%
6 months ( <u>crown to rump</u> )	39.9	43.8	47.9
4th birthday	41.9	46.6	51.6
6th birthday	46.6	52.2	56.6
8th birthday	52.0	57.1	62.0
10th birthday	55.2	60.6	64.8

### Height (cm) CDC (2000)

	Percentile		
	5%	50%	95%
6 months	62.0	66.1	70.6
4th birthday	94.6	101.5	108.7
6th birthday	106.8	115.1	123.6
8th birthday	118.5	127.7	137.6
10th birthday	127.6	138.3	149.5

### Buttock to Popliteal Length (cm) see Bilston & Sagar, 2007

	Percentile		
	5%	50%	95%
6 months	-	-	-
4th birthday	23.2	24.5	28.5
6th birthday	26.2	29.2	32.1
8th birthday	30.7	33.4	37.2
10th birthday	33.8	37.2	41.6

For further discussion of restraint ergonomics and sizing issues, see **L. E. Bilston** and N. Sagar, “Geometry of rear seats and child restraints compared to child anthropometry”, Stapp Car Crash Journal 51:275-298, 2007.