

Boys SBP by Age and Height (Normal SBP is less than the prehypertensive result.)

Age i	BP Classification	Systolic BP (mmHg)						
3	Height (cm)	92	94	96	99	102	104	106
	Prehypertension	100	101	103	105	107	108	109
	Stage 1 HTN	104	105	107	109	110	112	113
	Stage 2 HTN	116	117	119	121	123	124	125
4	Height (cm)	99	100	103	106	109	112	113
	Prehypertension	102	103	105	107	109	110	111
	Stage 1 HTN	106	107	109	111	112	114	115
	Stage 2 HTN	118	119	121	123	125	126	127
5	Height (cm)	104	106	109	112	116	119	120
	Prehypertension	104	105	106	108	110	111	112
	Stage 1 HTN	108	109	110	112	114	115	116
	Stage 2 HTN	120	121	123	125	126	128	128
6	Height (cm)	110	112	115	119	122	126	127
	Prehypertension	105	106	108	110	111	113	113
	Stage 1 HTN	109	110	112	114	115	117	117
	Stage 2 HTN	121	122	124	126	128	129	130
7	Height (cm)	116	118	121	125	129	132	134
	Prehypertension	106	107	109	111	113	114	115
	Stage 1 HTN	110	111	113	115	117	118	119
	Stage 2 HTN	122	123	125	127	129	130	131
8	Height (cm)	121	123	127	131	135	139	141
	Prehypertension	107	109	110	112	114	115	116
	Stage 1 HTN	111	112	114	116	118	119	120
	Stage 2 HTN	124	125	127	128	130	132	132
9	Height (cm)	126	128	132	136	141	145	147
	Prehypertension	109	110	112	114	115	117	118
	Stage 1 HTN	113	114	116	118	119	121	121
	Stage 2 HTN	125	126	128	130	132	133	134
10	Height (cm)	130	133	137	141	146	150	153
	Prehypertension	111	112	114	115	117	119	119
	Stage 1 HTN	115	116	117	119	121	122	123
	Stage 2 HTN	127	128	130	132	133	135	135
11	Height (cm)	135	137	142	146	151	156	159
	Prehypertension	113	114	115	117	119	120	120
	Stage 1 HTN	117	118	119	121	123	124	125
	Stage 2 HTN	129	130	132	134	135	137	137
12	Height (cm)	140	143	148	153	158	163	166
	Prehypertension	115	116	118	120	120	120	120
	Stage 1 HTN	119	120	122	123	125	127	127
	Stage 2 HTN	131	132	134	136	138	139	140
13	Height (cm)	147	150	155	160	166	171	173
	Prehypertension	117	118	120	120	120	120	120
	Stage 1 HTN	121	122	124	126	128	129	130
	Stage 2 HTN	133	135	136	138	140	141	142
14	Height (cm)	154	157	162	167	173	177	180
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	124	125	127	128	130	132	132
	Stage 2 HTN	136	137	139	141	143	144	145
15	Height (cm)	159	162	167	172	177	182	184
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	126	127	129	131	133	134	135
	Stage 2 HTN	139	140	141	143	145	147	147
16	Height (cm)	162	165	170	175	180	184	186
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	129	130	132	134	135	137	137
	Stage 2 HTN	141	142	144	146	148	149	150
17	Height (cm)	164	166	171	176	181	185	187
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	131	132	134	136	138	139	140
	Stage 2 HTN	144	145	146	148	150	151	152



Measurement

- Begin routine blood pressure (BP) measurement at 3 years of age.
- Correct cuff size depends on arm size. Practically speaking, correct cuff size equals largest cuff that will fit on the upper arm with room below for the stethoscope head.
- BP should be measured in the right arm of a relaxed, seated child.
- BP measurement by auscultation is the Gold Standard.
- BP by automated device correlates reasonably well with auscultation, with practical advantages of rapid measurement remote from child and elimination of reader error.
- If BP is high by automated device, repeat by auscultation.

BP Classification/Interpretation

BP is classified by systolic BP (SBP) and diastolic BP (DBP) percentiles for age/sex/height. If SBP or DBP >90th percentile, repeat twice at same office visit before interpreting result.

Normal BP: SBP and DBP <90th percentile

⇒ Recheck in 1 year.

Prehypertension: SBP or DBP ≥ 90th percentile to <95th percentile or BP >120/80 mmHg to <95th percentile

⇒ Recheck in 6 months.

⇒ Begin weight management (as appropriate).

Stage 1 Hypertension (HTN): SBP and/or DBP ≥ 95th percentile to ≤ 99th percentile plus 5 mmHg

⇒ Recheck in 1 to 2 weeks.

⇒ If BP remains at this level on recheck, begin evaluation and treatment including weight management if appropriate.

Stage 2 HTN: SBP and/or DBP >99th percentile plus 5 mmHg

⇒ Begin evaluation and treatment within 1 week, immediately if symptomatic.

Systolic BP Percentile Tables

Since diastolic HTN rarely occurs without systolic HTN in children, the SBP percentile tables on the next page can be used for HTN screening. If a child's SBP on screening is classified as prehypertension or HTN, then both SBP and DBP percentiles should be determined using the tables in the complete report: The Fourth Report on the Diagnosis, Evaluation, and Treatment of High Blood Pressure in Children and Adolescents. *Pediatrics* 2004 Aug;114(Suppl 2:):555-76; or http://www.nhlbi.nih.gov/health/prof/heart/hbp/hbp_ped.htm.

Directions for Use of Tables

1. Heights in the table are given for age at midyear. Use closest height to interpret BP.
2. **Prehypertension** SBP ≥ value from table (90th percentile) to < Stage 1 HTN value; or SBP >120 mmHg to < Stage 1 HTN value.
 - Stage 1 HTN** SBP ≥ value from the table (95th percentile) to ≤ Stage 2 HTN.
 - Stage 2 HTN** SBP >value from table (99th percentile plus 5 mmHg).

For more information go to: www.nhlbi.nih.gov.