

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

Age ↓	BP Classification	Systolic BP (mmHg)						
3	Height (cm)	91	92	95	98	100	103	105
	Prehypertension	100	100	102	103	104	106	106
	Stage 1 HTN	104	104	105	107	108	109	110
	Stage 2 HTN	116	116	118	119	120	121	122
4	Height (cm)	97	99	101	104	108	110	112
	Prehypertension	101	102	103	104	106	107	108
	Stage 1 HTN	105	106	107	108	110	111	112
	Stage 2 HTN	117	118	119	120	122	123	124
5	Height (cm)	104	105	108	111	115	118	120
	Prehypertension	103	103	105	106	107	109	109
	Stage 1 HTN	107	107	108	110	111	112	113
	Stage 2 HTN	119	119	121	122	123	125	125
6	Height (cm)	110	112	115	118	122	126	128
	Prehypertension	104	105	106	108	109	110	111
	Stage 1 HTN	108	109	110	111	113	114	115
	Stage 2 HTN	120	121	122	124	125	126	127
7	Height (cm)	116	118	121	125	129	132	135
	Prehypertension	106	107	108	109	111	112	113
	Stage 1 HTN	110	111	112	113	115	116	116
	Stage 2 HTN	122	123	124	125	127	128	129
8	Height (cm)	121	123	127	131	135	139	141
	Prehypertension	108	109	110	111	113	114	114
	Stage 1 HTN	112	112	114	115	116	118	118
	Stage 2 HTN	124	125	126	127	128	130	130
9	Height (cm)	125	128	131	136	140	144	147
	Prehypertension	110	110	112	113	114	116	116
	Stage 1 HTN	114	114	115	117	118	119	120
	Stage 2 HTN	126	126	128	129	130	132	132
10	Height (cm)	130	132	136	141	146	150	153
	Prehypertension	112	112	114	115	116	118	118
	Stage 1 HTN	116	116	117	119	120	121	122
	Stage 2 HTN	128	128	130	131	132	134	134
11	Height (cm)	136	138	143	148	153	157	160
	Prehypertension	114	114	116	117	118	119	120
	Stage 1 HTN	118	118	119	121	122	123	124
	Stage 2 HTN	130	130	131	133	134	135	136
12	Height (cm)	143	146	150	155	160	164	166
	Prehypertension	116	116	117	119	120	120	120
	Stage 1 HTN	119	120	121	123	124	125	126
	Stage 2 HTN	132	132	133	135	136	137	138
13	Height (cm)	148	151	155	159	164	168	170
	Prehypertension	117	118	119	120	120	120	120
	Stage 1 HTN	121	122	123	124	126	127	128
	Stage 2 HTN	133	134	135	137	138	139	140
14	Height (cm)	151	153	157	161	166	170	172
	Prehypertension	119	120	120	120	120	120	120
	Stage 1 HTN	123	123	125	126	127	129	129
	Stage 2 HTN	135	136	137	138	140	141	141
15	Height (cm)	152	154	158	162	167	171	173
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	124	125	126	127	129	130	131
	Stage 2 HTN	136	137	138	139	141	142	143
16	Height (cm)	152	154	158	163	167	171	173
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	125	126	127	128	130	131	132
	Stage 2 HTN	137	138	139	140	142	143	144
17	Height (cm)	152	155	159	163	167	171	174
	Prehypertension	120	120	120	120	120	120	120
	Stage 1 HTN	125	126	127	129	130	131	132
	Stage 2 HTN	138	138	139	141	142	143	144

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.