

BP Levels for Girls by Age and Height Percentile⁶

Age (years)	Systolic BP (mmHg)							Diastolic BP (mmHg)							BP Percentile
	Heigh Percentile or Measured Height							Heigh Percentile or Measured Height							
	5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th	
2	33.4	34.0	34.9	35.9	36.9	37.8	38.4	33.4	34.0	34.9	35.9	36.9	37.8	38.4	Height - inches
	87	87	88	89	90	91	91	45	46	47	48	49	50	51	NT
	101	101	102	103	104	105	106	58	58	59	60	61	62	62	Elevated BP
	104	105	106	106	107	108	109	62	63	63	64	65	66	66	Stage 1 HT
	116	117	118	118	119	120	121	74	75	75	76	77	78	78	Stage 2 HT
3	35.8	36.4	37.3	38.4	39.6	40.6	41.2	35.8	36.4	37.3	38.4	39.6	40.6	41.2	Height - inches
	88	89	89	90	91	92	93	48	48	49	50	51	53	53	NT
	102	103	104	104	105	106	107	60	61	61	62	63	64	65	Elevated BP
	106	106	107	108	109	110	110	64	65	65	66	67	68	69	Stage 1 HT
	118	118	119	120	121	122	122	76	77	77	78	79	80	81	Stage 2 HT
4	38.3	38.9	39.9	41.1	42.4	43.5	44.2	38.3	38.9	39.9	41.1	42.4	43.5	44.2	Height - inches
	89	90	91	92	93	94	94	50	51	51	53	54	55	55	NT
	103	104	105	106	107	108	108	62	63	64	65	66	67	67	Elevated BP
	107	108	109	109	110	111	112	66	67	68	69	70	70	71	Stage 1 HT
	119	120	121	121	122	123	124	78	79	80	81	82	82	83	Stage 2 HT
5	40.8	41.5	42.6	43.9	45.2	46.5	47.3	40.8	41.5	42.6	43.9	45.2	46.5	47.3	Height - inches
	90	91	92	93	94	95	96	52	52	53	55	56	57	57	NT
	104	105	106	107	108	109	110	64	65	66	67	68	69	70	Elevated BP
	108	109	109	110	111	112	113	68	69	70	71	72	73	73	Stage 1 HT
	120	121	121	122	123	124	125	80	81	82	83	84	85	85	Stage 2 HT
6	43.3	44.0	45.2	46.6	48.1	49.4	50.3	43.3	44.0	45.2	46.6	48.1	49.4	50.3	Height - inches
	92	92	93	94	96	97	97	54	54	55	56	57	58	59	NT
	105	106	107	108	109	110	111	67	67	68	69	70	71	71	Elevated BP
	109	109	110	111	112	113	114	70	71	72	72	73	74	74	Stage 1 HT
	121	121	122	123	124	125	126	82	83	84	84	85	86	86	Stage 2 HT
7	45.6	46.4	47.7	49.2	50.7	52.1	53.0	45.6	46.4	47.7	49.2	50.7	52.1	53.0	Height - inches
	92	93	94	95	97	98	99	55	55	56	57	58	59	60	NT
	106	106	107	109	110	111	112	68	68	69	70	71	72	72	Elevated BP
	109	110	111	112	113	114	115	72	72	73	73	74	74	75	Stage 1 HT
	121	122	123	124	125	126	127	84	84	85	85	86	86	87	Stage 2 HT
8	47.6	48.4	49.8	51.4	53.0	54.5	55.5	47.6	48.4	49.8	51.4	53.0	54.5	55.5	Height - inches

⁶ The 90th percentile is 1.28 SD, the 95th percentile is 1.645 SD, and the 99th percentile is 2.326 SD over the mean. **NT** = normotensive (50th percentile). **PreHT** = pre-hypertensive (90th percentile). **HT** = hypertensive (95th percentile for stage 1 and 99th% + 5 mmHg for stage 2).

	93	94	95	97	98	99	100	56	56	57	59	60	61	61	NT
	107	107	108	110	111	112	113	69	70	71	72	72	73	73	Elevated BP
	110	111	112	113	115	116	117	72	73	74	74	75	75	75	Stage 1 HT
	122	123	124	125	127	128	129	84	85	86	86	87	87	87	Stage 2 HT
9	49.3	50.2	51.7	53.4	55.1	56.7	57.7	49.3	50.2	51.7	53.4	55.1	56.7	57.7	Height - inches
	95	95	97	98	99	100	101	57	58	59	60	60	61	61	NT
	108	108	109	111	112	113	114	71	71	72	73	73	73	73	Elevated BP
	112	112	113	114	116	117	118	74	74	75	75	75	75	75	Stage 1 HT
	124	124	125	126	128	129	130	86	86	87	87	87	87	87	Stage 2 HT
10	51.1	52.0	53.7	55.5	57.4	59.1	60.2	51.1	52.0	53.7	55.5	57.4	59.1	60.2	Height - inches
	96	97	98	99	101	102	103	58	59	59	60	61	61	62	NT
	109	110	111	112	113	115	116	72	73	73	73	73	73	73	Elevated BP
	113	114	114	116	117	119	120	75	75	76	76	76	76	76	Stage 1 HT
	125	126	126	128	129	131	132	87	87	88	88	88	88	88	Stage 2 HT
11	53.4	54.5	56.2	58.2	60.2	61.9	63.0	53.4	54.5	56.2	58.2	60.2	61.9	63.0	Height - inches
	98	9	101	102	104	105	106	60	60	60	61	62	63	64	NT
	111	112	113	114	116	118	120	74	74	74	74	74	75	75	Elevated BP
	115	116	117	118	120	123	124	76	77	77	77	77	77	77	Stage 1 HT
	127	128	129	130	132	135	136	88	89	89	89	89	89	89	Stage 2 HT
12	56.2	57.3	59.0	60.9	62.8	64.5	65.5	56.2	57.3	59.0	60.9	62.8	64.5	65.5	Height - inches
	102	102	104	105	107	108	108	61	61	61	62	64	65	65	NT
	114	115	116	118	120	122	122	75	75	75	75	76	76	76	Elevated BP
	118	119	120	122	124	125	126	78	78	78	78	79	79	79	Stage 1 HT
	130	131	132	134	136	137	138	90	90	90	90	91	91	91	Stage 2 HT
13	58.3	59.3	60.9	62.7	64.5	66.1	67.0	58.3	59.3	60.9	62.7	64.5	66.1	67.0	Height - inches
	104	105	106	107	108	108	109	62	62	63	64	65	65	66	NT
	116	117	119	121	122	123	123	75	75	75	76	76	76	76	Elevated BP
	121	122	123	124	126	126	127	79	79	79	79	80	80	81	Stage 1 HT
	133	134	135	136	138	138	139	91	91	91	91	92	92	93	Stage 2 HT
14	59.3	60.2	61.8	63.5	65.2	66.8	67.7	59.3	60.2	61.8	63.5	65.2	66.8	67.7	Height - inches
	105	106	107	108	109	109	109	63	63	64	65	66	66	66	NT
	118	118	120	122	123	123	123	76	76	76	76	77	77	77	Elevated BP
	123	123	124	125	126	127	127	80	80	80	80	81	81	82	Stage 1 HT
	135	135	136	137	138	139	139	92	92	92	92	93	93	94	Stage 2 HT
15	59.7	60.6	62.2	63.9	65.6	67.2	68.1	59.7	60.6	62.2	63.9	65.6	67.2	68.1	Height - inches
	105	106	107	108	109	109	109	64	64	64	65	66	67	67	NT
	118	119	121	122	123	123	124	76	76	76	77	77	78	78	Elevated BP
	124	124	125	126	127	127	128	80	80	80	81	82	82	82	Stage 1 HT
	136	136	137	138	139	139	140	92	92	92	93	94	94	94	Stage 2 HT

16	59.9	60.8	62.4	64.1	65.8	67.3	68.3	59.9	60.8	62.4	64.1	65.8	67.3	68.3	Height - inches
	106	107	108	109	109	110	110	64	64	65	66	66	67	67	NT
	119	120	122	123	124	124	124	76	76	76	77	78	78	78	Elevated BP
	124	125	125	127	127	128	128	80	80	80	81	82	82	82	Stage 1 HT
	136	137	137	139	139	140	140	92	92	92	93	94	94	94	Stage 2 HT
17	60.0	60.9	62.5	64.2	65.9	67.4	68.4	60.0	60.9	62.5	64.2	65.9	67.4	68.4	Height - inches
	107	108	109	110	110	110	111	64	64	65	66	66	66	67	NT
	120	121	123	124	124	125	125	76	76	77	77	78	78	78	Elevated BP
	125	125	126	127	128	128	128	80	80	80	81	82	82	82	Stage 1 HT
	137	137	138	139	140	140	140	92	92	92	93	94	94	94	Stage 2 HT

Scoliosis Screening

The Scoliosis Research Society (SRS), American Academy of Orthopedic Surgeons (AAOS), Pediatric Orthopedic Society of North America (POSNA) and American Academy of Pediatrics (AAP) recommend that scoliosis screening be performed twice for females at age ten and twelve years, while males should be screened once at age 13 to 14 years. It is recommended to screen females twice and at younger ages because females reach puberty earlier and have scoliosis requiring treatment more frequently than males.

To be congruent with age-specific scoliosis screening recommendations, schools are encouraged to screen all 5th grade girls, 7th grade girls and 8th grade boys for scoliosis once a year. Screening girls in only 6th grade is a reasonable alternative. Staff training for scoliosis screenings is required and specific LEA protocols must be used. If your school system chooses to screen for scoliosis, it is recommended to partner with a local orthopedic doctor, osteopathy doctor or other trained professional to provide specific training for school staff and/or volunteers.

Scoliosis Screening Rationale

Scoliosis is a physical condition characterized by an abnormal curvature of the spine. Its cause is unknown in most cases. The amount of curvature is measured in degrees after an X-ray and can vary from mild to severe. It is most often seen in the middle school age group when rapid growth is occurring. Both girls and boys may be affected, but the risk of curve progression is ten times higher in females. Treatment ranges from observation to bracing to corrective surgery in severe cases. After scoliosis is identified or suspected, follow-up is essential to measure the degree of curvature and determine treatment options. Kyphosis, an accentuated spinal hump, and lordosis, or swayback, may occur independently or in conjunction with scoliosis.

Scoliosis Screening Program

Scoliosis screening consists of a primary screen by school personnel. Specially trained PE (Physical Education) teachers, clinic personnel, or volunteers can complete or assist school nurses with primary screening. Female examiners are preferable for female students. A second screening of those who appear to deviate from normal shall be performed at a separate session