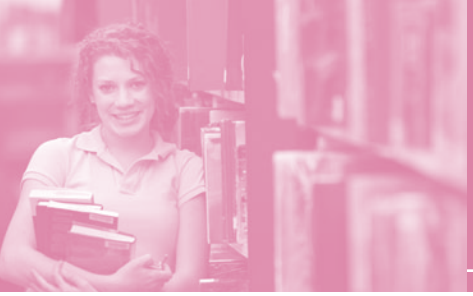


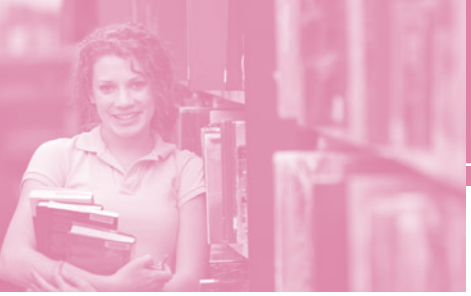
Blood Pressure Levels for Adolescent Girls by Age and Height Percentile*

Age (Years)	Blood Pressure Percentile	Systolic Blood Pressure (mm Hg) Percentile of Height							Diastolic Blood Pressure (mm Hg) Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
13	50th	104	105	106	107	109	110	110	62	62	62	63	64	65	65
	90th	117	118	119	121	122	123	124	76	76	76	77	78	79	79
	95th	121	122	123	124	126	127	128	80	80	80	81	82	83	83
	99th	128	129	130	132	133	134	135	87	87	88	89	89	90	91
14	50th	106	106	107	109	110	111	112	63	63	63	64	65	66	66
	90th	119	120	121	122	124	125	125	77	77	77	78	79	80	80
	95th	123	123	125	126	127	129	129	81	81	81	82	83	84	84
	99th	130	131	132	133	135	136	136	88	88	89	90	90	91	92
15	50th	107	108	109	110	111	113	113	64	64	64	65	66	67	67
	90th	120	121	122	123	125	126	127	78	78	78	79	80	81	81
	95th	124	125	126	127	129	130	131	82	82	82	83	84	85	85
	99th	131	132	133	134	136	137	138	89	89	90	91	91	92	93
16	50th	108	108	110	111	112	114	114	64	64	65	66	66	67	68
	90th	121	122	123	124	126	127	128	78	78	79	80	81	81	82
	95th	125	126	127	128	130	131	132	82	82	83	84	85	85	86
	99th	132	133	134	135	137	138	139	90	90	90	91	92	93	93
17	50th	108	109	110	111	113	114	115	64	65	65	66	67	67	68
	90th	122	122	123	125	126	127	128	78	79	79	80	81	81	82
	95th	125	126	127	129	130	131	132	82	83	83	84	85	85	86
	99th	133	133	134	136	137	138	139	90	90	91	91	92	93	93

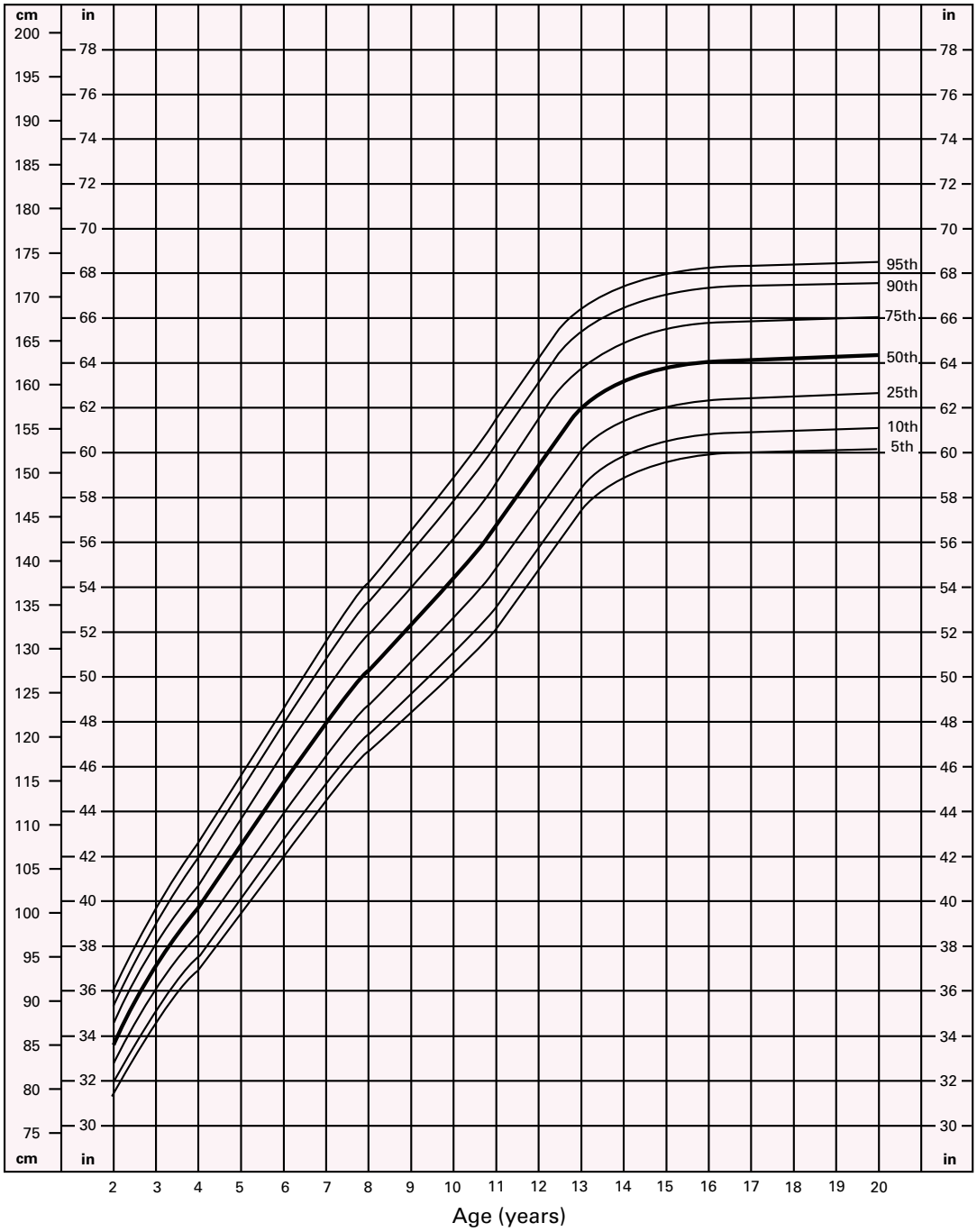
1. **Use the standard height chart (on back) to determine the height percentile.**
2. **Measure and record the adolescent's systolic blood pressure and diastolic blood pressure levels.**
3. **Find the adolescent's age on the left side of the table.** Follow the age row horizontally across the table to the intersection of the line for the height percentile (vertical column).
4. **Find the 50th, 90th, 95th, and 99th percentiles for systolic blood pressure levels in the left columns and for diastolic blood pressure levels in the right columns.**
   - Blood pressure levels less than the 90th percentile is normal.
   - Blood pressure levels between the 90th and 95th percentile is prehypertension and an indication for lifestyle modifications. In adolescents, blood pressure levels greater than or equal to 120/80 mm Hg is prehypertension, even if this figure is less than the 90th percentile.
   - Blood pressure levels greater than the 95th percentile may be hypertension.
5. **If the blood pressure level is greater than the 90th percentile, it should be measured twice during the same office visit, and average systolic blood pressure and diastolic blood pressure levels should be used.**
6. **If the blood pressure level is greater than the 95th percentile, it should be staged.** If it is found to be stage 1 (95th percentile to the 99th percentile plus 5 mm Hg), measurements should be repeated on two more occasions. If hypertension is confirmed, an evaluation should follow. If the blood pressure level is found to be stage 2 (greater than the 99th percentile plus 5 mm Hg), prompt referral should be made for evaluation and therapy. If the patient is symptomatic, immediate referral and treatment are indicated.

*For those 18 years of age and older, hypertension is defined as a systolic blood pressure level of 140 mm Hg or higher or a diastolic blood pressure level of 90 mm Hg or higher. Normal blood pressure level is a systolic blood pressure of less than 120 mm Hg and a diastolic blood pressure level of less than 80 mm Hg. Prehypertension is defined as a systolic blood pressure level of 120–139 mm Hg or a diastolic blood pressure level of 80–89 mm Hg. Individuals with prehypertension are at increased risk of progressing to hypertension.

The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. Pediatrics 2004;114(suppl):555. Available at: http://pediatrics.aappublications.org/cgi/reprint/114/2/S2/555. pdf. Retrieved November 5, 2007.



Height-for-Age Percentiles: Girls Aged 2–20 Years in the United States



Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000).

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