Blood Pressure

Year 1	Year 2	Core Clinical/Year 3+
Do • Patient at rest for 5 minutes • Arm at heart level • Correct size cuff- bladder encircles 80% of arm • Center of cuff aligns with brachial artery • Cuff wrapped snugly on bare arm with lower edge 2-3 cm above antecubital fossa • Palpate radial artery, inflate cuff to 70 mmHg, then increase in 10 mmHg increments to 30 mmHg above point where radial pulse disappears. Deflate slowly until pulse returns; this is the approximate systolic pressure. • Auscultate the Korotkoff sounds -place bell lightly in antecubital fossa -inflate BP to 20-30mmHg above SBP as determined by palpation -deflate cuff at rate 2mmHg/second while auscultating -first faint tapping (Phase I Korotkoff) = SBP; Disappearance of sound (Phase V Korotkoff)=DBP Know -Korotkoff sounds are lower pitch, better heard by bell -palpation of radial artery to estimate systolic pressure helps prevent underestimation of SBP if an auscultatory gap is present.	Do • Measure postural BP and pulse in patients with a history suggestive of volume depletion or syncope -Measure BP and pulse in supine position -Slowly have patient rise and stand (lie them down promptly if symptoms of lightheadedness occur) -Measure BP and pulse after 1 minute of standing Know • Normally when a person stands fluid shifts to lower extremities causing a compensatory rise in pulse by up to 10 bpm with BP dropping slightly • Positive postural vital signs are defined as symptoms of lightheadedness and/or a drop in SBP of 20 mmHg with standing • Know variations in BP cuff sizes • A lack of rise in pulse in a patient with an orthostatic drop in pressure is a clue that the cause is neurologic or related or related to medications (eg. alpha-blockers)	

Pulse

Year 1	Year 2	Core Clinical/Year 3+
<u>Do</u> Palpate the radial pulse at the wrist • Count the number of beats in 15 seconds and multiply by 4 • Note the rhythm of the pulse: regular, irregular, regularly irregular, irregularly irregular <u>Know</u> -Korotkoff sounds are lower pitch, better heard by bell -Palpation of radial artery to estimate systolic pressure helps prevent underestimation of SBP if an auscultatory gap is present.	<u>Know</u> Normal adult pulse is 60-80bpm • Bradycardia <60bpm • Tachycardia >100bpm - Sinus arrhythmia is a normal finding in adults with inhalation the pulse rate increases and with exhalation pulse rate decreases - Atrial fibrillation is the most common sustained arrhythmia and it causes an irregularly irregular rhythm. - Palpation will frequently underestimate the ventricular rhythm and auscultation at the cardiac apex is needed to accurately measure the pulse rate.	

Respirations

Year 1	Year 2	Core Clinical/Year 3+
<u>Do</u> Observe the patients breathing for a minute and count respirations	<u>Know</u> Normal adult respiration rate is 8-20 breaths/minute • Bradypnea <8 bpm • Tachypnea >20 bpm • Apnea = respiratory pauses of $\geq$20 bpm	

Temperature

Year 1	Year 2	Core Clinical/Year 3+
<u>Do</u> Measure temperature by oral, tympanic or temporal thermometer	<u>Know</u> Normal adult temperature varies from 35.8°C-37.3°C • Fever: oral temperature >37.9 • Hypothermia: core body temperature confirmed rectally <35.0°C	

Height/Weight

Year 1	Year 2
Know : Importance of checking ht. and weight	<u>Know</u> Obesity is defined as BMI>30 (kg/(ht in meters)^2)