

Blood Pressure Measurement Technique Checklist

Patient preparation

- Ask patient if he/she has ingested caffeine or used nicotine within the past 60 minutes or exercised within the past 30 minutes. Also note if the patient is in pain or very emotionally upset.
- Patient should sit quietly for at least 5 minutes prior to measurement; measure may be the last task done prior to nurse/MA leaving the room.

Select correct cuff size (measure yearly or if significant weight change has occurred)

- Arm is measured at mid upper arm half way between elbow and top of shoulder.
- Bladder width should equal 40% of upper arm circumference, bladder length 80-100% circumference of upper arm.

Check the equipment

- Gauge needle or mercury column is at zero. Don't use if any breaks in cuff, tears in fabric, or cracks in tubing.
- Use a 12-15 inch stethoscope tubing and bell/diaphragm stethoscope head.

Patient/equipment positioned correctly

- Measurement done on bare arm - remove a sleeve that cannot be rolled up without causing restriction.
- Patient is seated in chair with back supported.
- Feet flat on the floor, legs uncrossed.
- Arm supported at heart level, slightly bent with palm up.
- Manometer positioned at healthcare practitioner's eye level.
- Patient instructed not to talk.
- Palpate the brachial artery.
- Position the center of the cuff's bladder over the brachial artery.
- Apply cuff evenly and snugly one-inch above bend of arm.

Obtain estimated systolic pressure

- Palpate the radial artery pulse; inflate the cuff to the point where the pulse can no longer be felt.
- Slowly deflate the cuff, noting the point where the pulse can be felt (this is the estimated systolic bp).
- Rapidly deflate the cuff.
- Determine the maximum inflation level (MIL) by adding 20-30 mmHg to the estimated systolic pressure (this is the level the cuff should be inflated to when taking the bp measurement).
- After determining the MIL, wait 15-30 seconds before re-inflating the cuff.



Taking the BP measurement

- Earpieces of the stethoscope are angled forward to fit snugly.
- Place the bell or the diaphragm head of the stethoscope lightly over the brachial artery at the bend of the elbow, but with good skin contact (too much pressure can close off the vessel and distort the sounds). Rapidly and steadily inflate the cuff to the MIL.
- Release the air in the cuff so the pressure falls at 2-3 mmHg per second.
- Note where the first of two consecutive beats appears in relation to the number on the gauge (this is the systolic pressure).
- Continue deflation - note on the gauge where the last sound is heard. This is the diastolic pressure.
- Continue deflation for 10 mmHg past the last sound (this assures that the absence of sound is not a skipped beat but is the true end of the sound), then deflate the cuff rapidly and completely.
- Wait a minimum of 1 minute and take a second measurement. The average of those readings is used.
- On the first visit, compare readings in both arms. For monitoring, use the arm with the higher reading.
- Record the BP to the closest 2 mmHg, which arm used, patient position, and cuff size.