

# Detection and Management High Blood Pressure



## Checking SMBP Equipment Accuracy

### Step 1: Help patients select accurate equipment

- Recommend purchasing equipment that has been approved under a formal validation protocol

**Note:** Not all equipment provides accurate readings in all people. Measurements may be consistently +5mm Hg, so it's important to encourage patients to bring their equipment in to the office to measure its accuracy.

### Step 2: Prepare patient for BP measurement

- Sit in chair with back supported
- Legs uncrossed - feet flat on floor
- Arm on firm surface at heart level
- Rest 5 minutes (minimum)
- No tobacco, exercise, caffeine 30 minutes prior to measurement
- Have patient use the bathroom

**Note:** Measurements taken on an exam table do not meet this requirement.

### Step 3: Size and place the cuff

- Verify patient's cuff size
- Inform patient if cuff size is wrong
- Align center of the bladder with brachial artery

**Note:** Avoid any conversation during the measurement to prevent an increase in blood pressure.

### Step 4: Take 5 measurements as follows (no more than 30 seconds apart)

- 1st + 2nd reading taken by patient using own SMBP equipment
- 3rd reading taken by clinic staff with mercury or comparable device
- 4th reading taken by the patient
- 5th reading taken by health care clinician

### Step 5: Compare the readings

- Readings usually decline over the 5 measurements; the final systolic may be 10 mm Hg lower than the first
- If the difference is 5 mm Hg or less, the comparison is acceptable
- Repeat if difference is between 5-10 mm Hg
- If difference is more than 10 mm Hg, device may not be accurate.
- Repeat this procedure annually