

Guide to Accurate Home Blood Pressure Monitoring for Providers

Patient training should occur under medical supervision, including:

- Information about hypertension.
- Selection of equipment.
- Acknowledgement that individual blood pressure (BP) readings may vary substantially.
- Interpretation of results.

Devices:

- Verify use of automated validated devices. Use of auscultatory devices (mercury, aneroid, or other) is not generally useful for home blood pressure monitoring (HBPM) because patients rarely master the technique required for measurement of BP with auscultatory devices.
- Monitors with provision for storage of readings in memory are preferred.
- Verify use of appropriate cuff size to fit the arm.
- Verify that left/right inter-arm differences are insignificant. If differences are significant, instruct patient to measure BPs in the arm with higher readings.

Instructions on HBPM procedures:

Remain still

- Avoid smoking, caffeinated beverages, or exercise within 30 minutes before BP measurements.
- Ensure at least 5 minutes of quiet rest before BP measurements.

Sit correctly

- Sit with back straight and supported (on a straight-backed dining chair, for example, rather than a sofa).
- Sit with feet flat on the floor and legs uncrossed.
- Keep arm supported on a flat surface (such as a table), with the upper arm at heart level.

Placement of BP cuff

Bottom of the cuff should be placed directly above the antecubital fossa (bend of the elbow).

Take multiple readings

- Take at least 2 readings 1 minute apart in the morning before taking medications and in the evening before going to bed.
- Optimally, measure and record BP daily.
- Ideally, obtain weekly BP readings beginning 2 weeks after a change in the treatment regimen and
 3-5 days before a clinic visit.

Record all readings accurately

- Monitors with built-in memory should be brought to all clinic appointments.
- BP should be based on an average of readings on ≥ 2 occasions for clinical decision-making.

Reference

Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on clinical practice guidelines. Hypertension. 2018;71(6):1269-1324. doi: 10.1161/HYP.000000000000066.