

Avoid Common Blood Pressure Measurement Errors

Top Takeaways

- Even small errors in blood pressure measurement can significantly skew results, leading to over or undertreatment of high blood pressure (hypertension).
- Point most patients to an automatic upper arm monitor and help order a properly sized cuff if needed.
- Encourage patients to bring their BP monitor to the pharmacy or an office visit so measurement technique and device accuracy can be checked.

Blood pressure is often measured incorrectly...leading to over- or undertreatment of high blood pressure (hypertension).

Take steps to help patients prevent common BP measurement errors.

Start with the right equipment. Point most patients to an automatic upper ARM monitor...they're the most accurate. Check the ValidateBP.org website to find devices that are validated for clinical accuracy.

Wrist monitors are discouraged...except for patients with severe obesity when upper arm cuffs don't fit. And finger monitors should be avoided...they're notoriously inaccurate.

For now, patients also shouldn't rely on "cuffless" BP devices (smartwatches, etc)...data on their reliability and precision are mixed.

Remember that "size matters" with cuffs. Be ready to order a properly sized cuff if needed. A cuff that's too small overestimates BP...one that's too large underestimates BP.

The cuff bladder length should cover about 80% of the arm circumference...with a width of about 40%.

Be aware that most OTC cuffs have an index marker and range lines...and the index should fall completely within the marked range.

Time readings right. Patients should rest quietly at least 5 min before the measurement withOUT talking, scrolling on their phone, etc.

They should also wait at least 30 min after exercise, smoking, or caffeine...even though caffeine usually doesn't raise BP in regular users.

But having a full bladder or using nicotine within 30 min before a reading can transiently increase systolic BP by 25 mm Hg or more.

Expect your pharmacist to encourage twice-daily measurements...such as in the morning before meds and breakfast and evening before dinner or sleep.

Avoid positioning pitfalls. Patients should sit still with legs uncrossed...feet flat on the floor...back supported...and the arm supported at heart level.

Lowering the arm below the heart may lead to falsely high BP numbers...having the arm higher than the heart may lead to falsely low BP.

Remind patients NOT to place the cuff over clothing...since this may throw off the reading by 10 to 50 mm Hg.

Track and verify results. Patients should take 2 readings about 1 min apart...and average the measurements. Suggest using a log or app to record the numbers...plus any missed med doses, illness, etc.

Encourage patients bring their home BP monitor to the pharmacist or prescriber to check their measurement

Cite this document as follows: Article, Avoid Common Blood Pressure Measurement Errors, Pharmacy Technician's Letter, March 2026

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2026 Therapeutic Research Center (TRC). TRC and Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.

technique...and confirm accuracy.

Explore our *Measuring Blood Pressure Checklist* for more tips...and our *Treatment of Hypertension* algorithm to review meds.

Key References:

- Jones DW, Ferdinand KC, Taler SJ, et al. 2025
AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation*. 2025 Sep 16;152(11):e114-e218.
- American Heart Association and the American Medical Association. Target: BP. 2025. <https://targetbp.org/> (Accessed February 17, 2026).
- Gulati M, Peterson LA, Mihailidou A. Assessment of blood pressure skills and belief in clinical readings. *Am J Prev Cardiol*. 2021 Oct 13;8:100280.

Pharmacy Technician's Letter. March 2026, No. 420317

Cite this document as follows: Article, Avoid Common Blood Pressure Measurement Errors, Pharmacy Technician's Letter, March 2026

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2026 Therapeutic Research Center (TRC). TRC and Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.