



# 7 SIMPLE TIPS TO GET AN ACCURATE BLOOD PRESSURE MEASUREMENT

AMERICAN MEDICAL ASSOCIATION

## Million Hearts in Action

[ Strategies for Achieving Million Hearts Goals ]



Measuring blood pressure is one of the most common procedures performed at a medical office. Yet, studies have shown that nurses, medical assistants and even doctors make numerous mistakes when taking readings. Failing to support a patient's back, for example, or engaging in conversation with the person while trying to measure his or her blood pressure can throw off a reading by as much as 25 mm Hg.<sup>i</sup>

A series of simple but striking infographics released by the American Medical Association is raising awareness about how to correct the seven most common errors people make when measuring blood pressure. The graphics have been AMA's most popular and widely shared images and are being used as tools for medical professionals and patients alike to get the most accurate reading possible.



**This is a big deal. A lot of people have blood pressure that are on the borderline of having hypertension, and these small errors can sway you one way or the other in a diagnosis and treatment with medication you might not need.”**

– Michael Rakotz

### [ Fast Facts ]

- Controlling high blood pressure, also known as hypertension, can be a major step in preventing heart disease.<sup>ii</sup>
- Common problems related to patient preparation and improper positioning often result in unreliable blood pressure readings.<sup>iii</sup>
- Misreading true blood pressure by even 5 mm Hg has the potential to mislabel someone as having high blood pressure, resulting in medication the person doesn't need.<sup>iv</sup> It also can result in the opposite, in which a patient fails to get necessary medical treatment.



<sup>i, ii, iii</sup>Pickering TG, Hall JE, Appel LJ, et al. Recommendations for blood pressure measurement in humans and experimental animals: part 1: blood pressure measurement in humans: a statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Circulation*. Feb 8 2005;111(5):697-716. (Article link here: <http://circ.ahajournals.org/content/111/5/697.long> )

<sup>iv</sup>Handler, Joel. "The Importance of Accurate Blood Pressure Measurement." *The Permanente Journal* 13.3 (2009): 51–54. (Article link here: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2911816/> )

## [ What We Did ]

The American Medical Association worked with Johns Hopkins Medicine on a program to improve blood pressure control. Part of that effort involved promoting protocols to help accurately measure blood pressure.

The AMA produced several versions of a one-page graphic entitled, “7 Simple Tips To Ensure an Accurate Blood Pressure Measurement,” which has helped inform physicians, patients and the general public that:

- Putting the cuff over clothing, rather than a bare arm, can add 10-40 mm Hg to a measurement.
- Having a full bladder can tack on 10-15 mm Hg.
- Talking or having a conversation: an additional 10-15 mm Hg.
- Failing to support the arm at heart level can add 10 mm Hg.
- An unsupported back can increase a measurement by 5-10 mm Hg. That same range applies to feet left dangling from an exam table or high chair.
- Crossing legs means an extra 2-8 mm Hg.

## [ What We Accomplished ]

- Following display of the graphic during an AMA presentation at TedMed, many physicians admitted they didn't realize they had been using improper techniques while measuring the blood pressure of patients.
- The “7 Simple Tips” graphics have become the most retweeted images for the American Medical Association. A video form of the graphic has received more than 520,000 views and 1.8 million impressions.
- Copies of the visual have been displayed in medical facilities throughout the country to train medical assistants and clinical staff.
- The graphic also has encouraged patients to become more proactive during their appointments and speak up when their body is not positioned correctly when someone is taking their blood pressure.



## [ What We Learned ]

- Many people in the medical profession, including doctors, fail to follow a standard set of protocols before taking a person's blood pressure because they haven't been sufficiently trained.
- Medical schools usually teach students how to measure a person's blood pressure only once, and early in the education process.
- But even current medical students don't know most of the steps necessary to get an accurate blood pressure reading, according to a study recently conducted by the AMA.

## [ What We Are Doing Now ]

The American Medical Association continues to distribute its graphic guide on the “7 Simple Steps” that should be followed when taking someone's blood pressure. The AMA also is examining the best ways to encourage more medical schools to enhance their lessons about the proper techniques necessary for getting the most accurate measurements possible.

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