

Preparing patients for blood pressure measurement

What is patient preparation?

The steps that you use to measure blood pressure for every patient.

Why is *patient preparation* important?

Hypertension treatment cut-offs come from clinical trials where researchers prepared patients in a way that let their bodies relax and their blood pressure settle as much as possible.

Factors that lead to falsely high or low BP readings	
When this occurs	BP readings can erroneously appear
Patient is talking or fidgeting	10-15 mmHg higher
Patient's back is not supported	5-15 mmHg higher
Cuff is too small for patient's arm	10-40 mmHg higher
Putting a BP cuff over clothing	10-40 mmHg higher or lower
Cuff on patient's arm is lower than heart-level	1-2 mmHg higher per inch below heart level
Cuff on patient's arm is higher than heart level	1-2 mmHg lower per inch above heart level
Patient's legs are crossed	5-8 mmHg higher
Patient's feet are dangling	5-15 mmHg higher
Patient has a full bladder	10-15 mmHg higher
Patient does not have a rest period	10-20 mmHg higher
The BP cuff is deflated too fast	Variable amounts higher or lower
Patient has only 1 BP reading	10-20 mmHg higher

Thus it is important to follow the steps used in clinical trials as closely as possible so that your blood pressure readings accurately predict whether patients should be treated for high blood pressure. Although, in clinical settings, it can be difficult to follow every step for every patient (e.g., giving patients a 5-minute rest period), you can improve the accuracy of your blood pressure readings by preparing your patient with *seven steps*.

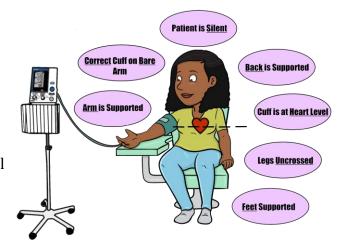
When do you prepare patients for blood pressure measurement?

Every time that you measure blood pressure.

How should you prepare patients for blood pressure measurement?

Seat your patient in a chair:

- Their arm should be bare
- Use the <u>correct cuff size</u> on their <u>upper arm</u>
- Sitting quietly without talking, reading or texting
- With their back supported
- With their <u>arm supported</u> so that the middle of the cuff is at heart level
- With their legs uncrossed
- With their <u>feet supported</u> on the floor or on a stool



Helpful tips

- Measure the blood pressure <u>before</u> painful activities like checking fingersticks or administering vaccinations
- [OTHERS]

For more information

Pickering, T. G., et al. (2005). "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."
<u>Circulation</u> 111(5): 697-716.

And check out the training modules and other materials at [www.richlifeprogram.org]