

If you are using a manual device use these quick tips to help you take an accurate and consistent blood pressure reading.



## **Taking Blood Pressure Manually**

- Check the condition of the device and the cuff size to ensure the reading is accurate. A small hole or crack in any part of the device e.g., rubber tubing, bulb, valves, and cuff can lead to inaccurate results. A cuff that is too small or too big may produce an incorrect high blood pressure reading.
- 2 It's important the patient feels comfortable and relaxed. Reassure the patient that there are no risks or complications associated with this screening.
- Have the patient relax and sit with their arm slightly bent on the same level as their heart and resting comfortably on a table or other flat surface.
- Place the inflatable blood pressure cuff securely on the upper arm (approximately one inch above the bend of the elbow). Make sure the cuff is touching the skin. You may have to ask your patient roll up their sleeve, or remove their arm from the sleeve.
- Close the pressure valve on the rubber inflating bulb, and pump the bulb rapidly to inflate the cuff. The cuff should be inflated so that the dial reads about 30 mm Hg higher than your patient's at-rest systolic pressure. (TIP: If at-rest pressure is unknown, inflate the cuff to 210 mm Hg or until the pulse at the wrist disappears).
- 6 If using a stethoscope, place the earpieces in your ears and the bell of the stethoscope over the artery, just below the cuff. If the cuff has a built-in stethoscope bell, be sure to position the cuff so the bell is over the artery. The accuracy of a blood pressure recording depends on the correct positioning of the stethoscope over the artery, and making sure the stethoscope bell does not rub on the cuff or the patient's clothing.
- Now slowly release the pressure by twisting or pressing open the pressure valve, located on the bulb. Some blood pressure devices can automatically control the rate at which the pressure falls, but generally the patient's pressure should decrease about 2 to 3 mm Hg per second. Listen through the stethoscope and note on the dial when you *first start to hear a pulsing or tapping sound*—this is the *systolic blood pressure*. If you have trouble hearing the start of the pulse, you can find the patient's systolic blood pressure by asking your patient to tell you when they can start to feel the pulse in their wrist and noting the level on the dial.
- 8 Continue letting the air out slowly. The pulsing or tapping sounds will become dulled and finally disappear. Note on the dial *when the sounds completely stop*—this is the *diastolic blood pressure*. Finally, release the remaining air to relieve all pressure on your patient's arm.
- Suggest the patient write down their numbers along with the date and time. They can use the *Team Up. Pressure Down.* journal to keep track. Remind the patient to take their blood pressure regularly to ensure their medications are working appropriately.

## What the Readings Mean

Use this chart to help interpret blood pressure readings and provide recommendations to your patient. Remember, more than one reading is needed to accurately measure blood pressure and offer the greatest benefits.

STAGE 2 HYPERTENSION	RECOMMENDATIONS
Systolic Diastolic blood pressure blood pressure	Patient has hypertension and should seek medical care as soon as possible. If patient is not currently under the care of a physician, refer him/her to a primary care provider, and offer to make the call for them. If patient is currently taking hypertension medication(s), determine if he/she is adherent to the prescribed drug regimen. If adherent, make therapeutic suggestions to the patient and his/her provider to improve control. If not, determine existing adherence barriers and suggest ways for the patient to improve their compliance.
> (or equal to) 160 mmHg 100 mmHg	

STAGE 1 HYPERTENSION	RECOMMENDATIONS
Systolic Diastolic blood pressure blood pressure	Patient has hypertension and should seek medical care. If patient is not currently under the care of a physician, refer him/her to a primary care provider. If patient is currently taking hypertension medication(s), determine if he/she is adherent to the prescribed drug regimen. If adherent, make therapeutic suggestions to the patient and his/her provider to improve control. If not, determine existing adherence barriers and suggest ways for the patient to improve compliance.
140-159 mmHg <i>OR</i> 90-99 mmHg	

PREHYPE	RTENSION	RECOMMENDATIONS
Systolic blood pressure	Diastolic blood pressure	Patient has an increased risk of future hypertension. Suggest that the patient make lifestyle modifications and regularly
120-139 mmHg	<i>OR</i> 80-89 mmHg	monitor blood pressure.

NOF	MAL	RECOMMENDATIONS
Systolic blood pressure	Diastolic blood pressure	Encourage healthy behaviors and lifestyle modifications to
< 120 mmHg A	ND <80 mmHg	keep blood pressure in normal range.

*Resource:* Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003). Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure JNC Express (NIH Publication No. 03-5233). Bethesda, MD: U.S. Department of Health and Human Services.