

BLOOD PRESSURE CONTROL PROTOCOL TRAINING

Pamela Fick MS, RN, MBA
The University of Arizona
College of Nursing

OBJECTIVES

1

Understand what blood pressure is

2

Identify how to properly measure blood pressure

3

Recognize normal versus abnormal blood pressure readings

4

Discuss action steps for abnormal blood pressure readings

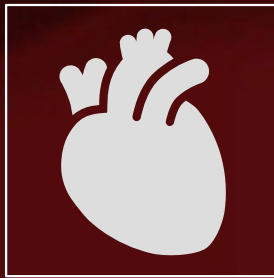
WHAT IS BLOOD PRESSURE?



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- Pressure of the blood as it is forced against arterial walls during cardiac contraction
- The resistance the heart must overcome to get the blood flow where it needs to go
- Measured in millimeters of mercury (mm Hg)
- Recorded as systolic pressure over diastolic pressure (e.g., 120/80 mm Hg)

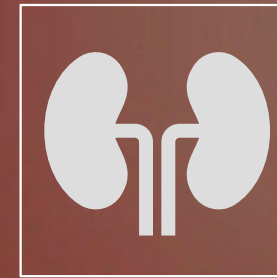
IMPORTANCE OF BLOOD PRESSURE



Contraction of the heart (systolic pressure) forces a bolus of oxygenated blood into the arterial circulation to provide a continuous supply of oxygen to all body cells (perfusion).



The heart then rests and refills with blood (diastolic pressure), which is pumped out to the tissues.



Any factor that interferes with this cycle can cause impaired tissue perfusion.

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Accurate measurement of blood pressure is important because

A. You are likely to see several hypertensive patients throughout the day

B. Blood pressure is used to diagnose and guide therapy

C. Inaccurate blood pressure may lead to organ damage

D. All of the above

MEASURING BLOOD PRESSURE

Manual



Image sources: Adobe Stock

Electronic



Image source: Wilkinson, J., Treas, L., Barnett, K., & Smith, M. (2020)



Patient should keep both feet flat on the floor – do not have legs crossed

Make sure cuff is appropriate size for patient

Have patient stay still

Avoid assessing blood pressure in an arm that has an intravenous access device, renal dialysis fistula, skin graft, extensive trauma, or a cast or dressing.


Do not use the arm that is paralyzed or on the same side of breast or shoulder surgery.

MEASURING BLOOD PRESSURE (CONTINUED)



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BLOOD PRESSURE READINGS

<h2>Blood Pressure Categories</h2>			
			
BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120-129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130-139	or	80-89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

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heart.org/bplevels

IMPROPER BLOOD PRESSURE MANAGEMENT



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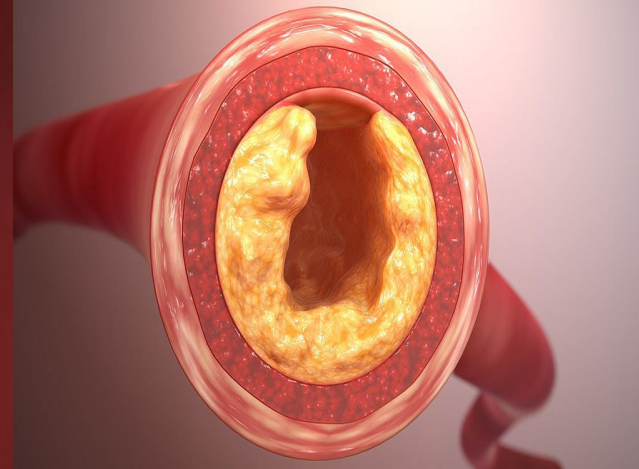


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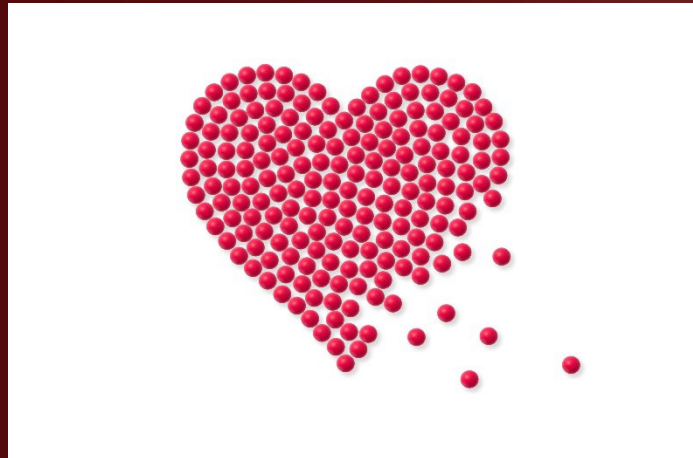


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ACTION STEPS FOR ABNORMAL READINGS

Retake

Retake blood pressure after 5 minutes



Ask

Ask patient if he/she knows what his/her baseline blood pressure is



Notify

Notify provider for blood pressure that falls under Hypertension Stage 1 or Hypertension Stage 2



Get

Get immediate medical attention for Hypertensive Crises

Normal Blood Pressure is a systolic reading of

less than 120 mmHg

less than 130 mmHg

more than 100 mmHg

more than 140 mmHg

REFERENCES

- American Heart Association. 2022. *Blood Pressure Toolkit*. <https://www.heart.org/en/health-topics/high-blood-pressure/high-blood-pressure-toolkit-resources>
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- Wilkinson, J., Treas, L., Barnett, K., & Smith, M. (2020). *Fundamentals of nursing: Theory, concepts, and applications* (4th ed.). F.A. Davis Company.