

Blood Pressure

What is Blood Pressure?

Blood pressure is the force exerted on the walls of the blood vessels as it circulates throughout the body. Blood pressure is recorded as two numbers; for example 110/70. The top number, or systolic pressure, is the larger of the two numbers and measures the pressure in the arteries when the muscle contracts (heart beats). The bottom number, or diastolic pressure, is the smaller of the two numbers and measures the pressure in the arteries between beats (as the heart refills with blood).

Many factors influence blood pressure. Taking accurate measurement over a period of times gives your primary care physician a clearer picture of your blood pressure. The American Heart Association recommends an automatic, cuff-style, bicep (upper arm) monitor. This can be purchased at most pharmacies and many department stores. Always discuss with your primary care physician which device he recommends and the blood pressure range he recommends for yourself or your family member.

Why monitoring blood pressure is important

High blood pressure can damage the body without producing any symptoms. Some effects may include:

- damage to the arteries which can lead to heart disease or heart attack
- stroke
- decrease or increase in delivery of blood to the brain
- kidney disease
- dementia

Low blood pressure occurs when not enough blood reaches all parts of the body resulting in cells not receiving enough oxygen and nutrients. Some effects of low blood pressure may include:

- dizziness; especially when standing
- fainting
- dehydration
- heart attack
- very rapid heartbeat (tachycardia)
- very slow heartbeat (bradycardia)
- abnormal heart rhythm (arrhythmia)

Having a brain injury makes the brain more sensitive to additional injury.

What can you do?

There are controllable risk factors that if managed can decrease the long term effects of abnormal blood pressure. Some of the major controllable risk factors include:

- obesity
- smoking
- cholesterol
- diabetes
- diet
- exercise
- pain management

Blood Pressure

Tips to measure your own blood pressure

- Measure blood pressure at the same time each morning and each evening.
- Place arm on the table or support arm. Do not let it hang down below heart
- Place blood pressure cuff snugly (not tight) to the upper arm. If this is not an option, you can also use the lower arm, thigh, or calf (see pictures below). If the person cannot be seated, it is OK to take the blood pressure while lying down. Just remember the arm should be supported at the level of the heart.
- Do not take blood pressure in a paralyzed limb.
- It is IMPORTANT that the cuff is properly sized. Too large of a cuff will give you an incorrect “low” reading and too small of a cuff will give you an incorrect “higher” reading.
- Relax for a minute or two then take the measurement; this can be repeated after 2 minutes.
- Record the Blood Pressure results in a log or journal. (Also available on myshepherdconnection.org)
- Please consult with your healthcare provider for specific recommendations of automatic blood pressure monitors. Always follow manufacturer guidelines of the device you are using.

Cuff Placement

Placement of cuff on upper arm (preferred):



Placement of cuff on forearm:



Placement of cuff on lower leg/calf:



Placement of cuff on upper thigh:



When to call the doctor

If you experience dizziness or lightheadedness, there could be an underlying cause and you should always notify your healthcare provider. If your blood pressure remains higher than what your healthcare provider recommends, notify him/her and follow any instructions they may have given you and be sure to keep your follow-up visit.

For more information please visit: *American Heart Association. What is High Blood Pressure?*

http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure_UCM_002020_SubHomePage.jsp

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