Blood Pressure

Why measure blood pressure?

Measuring the blood pressure provides the physician with important information about the condition of the patient’s heart. Blood pressure measures the pressure of the blood against the walls of the arteries.

Blood Pressure Reading

The first reading that is measured is the systolic reading. This is when the heart is contracting and the first time you hear the lub-dub when releasing the air from the blood pressure cuff. The second reading measures the diastolic pressure. This is when the heart is relaxing and the last time during the measurement when you hear the lub-dub.

Interpreting Blood Pressure Readings

Adult normal blood pressure is a systolic less than 120 over a diastolic less than 80. Any blood pressure above 140/90 is considered high blood pressure or hypertension (HTN). Prehypertension is a systolic of 120–139 over a diastolic of 80–89. Children 10 years and older will have a normal BP of 100/65, whereas adolescents 16 years and older will have a normal BP of 118/75.

The documentation of blood pressure is systolic/diastolic (120/80). Measuring a patient’s blood pressure takes practice. You must hear the lub-dub sound in order to obtain an accurate reading.
**Procedure for Measuring Blood Pressure**

One of the most important vital signs that a medical assistant is responsible for measuring and documenting is a patient’s blood pressure. This must be done accurately to avoid any misdiagnosis by the physician. Blood pressure measurement is best done with the patient sitting with his or her feet flat on the floor.

**Blood Pressure Monitor**

The medical assistant must select the appropriate-sized sphygmomanometer for the patient’s arm. All blood pressure monitors have a range marked within the cuff and an index mark. As long as the index line remains within the range when being placed on the patient’s arm, it is the correct size. The cuff also has a tag that has an arrow with writing next to it that says Right arm or Left arm. This arrow is used to align it over the brachial artery when placing the cuff on the patient’s arm. If you are not sure of the location of the brachial artery, you can place two fingers on the inner portion of the antecubital space until you feel a pulse. This will be the location of the brachial artery.

**Procedure**

1. Place the cuff snugly on the arm, three inches above the antecubital space (elbow).
2. Once the cuff is wrapped snugly, place the earpieces of the stethoscope in the ears.
3. Place the bell of the stethoscope on the brachial artery.
4. Pump up the BP cuff until the dial reads 180 on the gauge.
5. Slowly start releasing the air. At this time, you should be listening for the heartbeat coming from the stethoscope.
6. The very first time you hear the lub-dub (systolic), you should locate the dial on the gauge and remember that number.
7. Continue to slowly let the air out from the blood pressure cuff. The last time you hear the lub-dub (diastolic), you should locate the dial on the gauge and remember that number. These two numbers provide you with the patient’s blood pressure.