Measuring Blood Pressure – Aneroid Sphygmomanometer

- 1. Measure the blood pressure the same time each day if possible (morning and evening)/
- 2. Be sure the BP device is in good working condition.
- 3. You will need the following equipment:
 - a. Aneroid blood pressure cuff and gauge
 - b. Stethoscope (may be built into cuff)
 - c. Alcohol pads
 - d. Blood Pressure Tracker or Diary
 - e. Pen
- 4. Ask the person if he or she has had any caffeine, exercised or smoked in the past 30 minutes. If so, wait 30 minutes before checking the blood pressure.
- 5. If no caffeine, exercise or smoking, have the person relax at least 5 minutes before taking a blood pressure.
- 6. Be sure the room is quiet. Turn off the TV, radio so that you can be sure to hear the blood pressure sounds.
- 7. Wash your hands for 15 seconds and dry.
- 8. Help the person sit up straight in a comfortable position or lie down in bed.
- 9. Have the person place his or her feet flat on the floor if sitting. Do not let the person cross their legs while sitting or lying down.
- 10. Support the person's arm on a flat surface (such as a table) with the upper arm at heart level.
- 11. If sitting on a couch, have the person place the arm on several pillows, so the arm can be level with the heart.
- 12. Remove any tight fitting clothing or sleeves from the person's arm. Never wrap a cuff over the person's clothing.
- 13. Place your index and middle finger lightly over the person's pulse on the inner side of the crease in the elbow.
- 14. Be sure you feel a light tapping against the finger. This is the pulse.
- 15. Move your finger along the crease until you know you feel the pulse.
- 16. Position the blood pressure cuff 1 inch above the pulse by centering the arrows marked on the cuff. Make sure the middle of the cuff is placed directly over the brachial artery, which is found on the inside of the elbow,
- 17. Be sure the cuff is totally deflated as you wrap it evenly and snugly around the person's upper arm.
- 18. Position the gauge (numbers on dial) at eye level (within 2 to 3 feet of the gauge.
- 19. Place the stethoscope earpieces in your ears with the earpieces facing forward. Be sure you can hear clearly. Tap lightly on the diaphragm.
- 20. Relocate the pulse with your fingertip. You will feel it on the inner side of the crease in the elbow. Place the diaphragm of the stethoscope over it. Do not allow the diaphragm to touch clothing or the cuff. Do not move the diaphragm until you are done hearing the blood pressure.
- 21. Find the small valve on the bulb of the stethoscope and close it clockwise until tight.

- 22. Squeeze the bulb several times until the number on the gauge is 30 mm Hg above the person's usual systolic (top number) pressure. For example, if the person's blood pressure is normally 140/86, squeeze the bulb until the number is at 170 mm Hg.
- 23. If it is the first time you are checking a blood pressure, inflate the cuff until the pulse in the bend of the arm is no longer felt.
- 24. With the stethoscope in place, slowly release the valve and let the gauge needle fall at a rate of 2 to 3 mm Hg every second.
- 25. As you release the valve, listen and note the number on the gauge when you hear the first clear sound. It will be louder. That is the systolic blood pressure.
- 26. Continue to deflate the cuff slowly, noting when the sound disappears or the sound changes from a loud, strong sound to a muffled very light sound. Note the reading on the gauge to the nearest 2 mm Hg. That is the diastolic pressure.
- 27. Listen for another 10 to 20 mm Hg after you hear the last sound. Then release the valve fully and allow air to escape from the cuff.
- 28. If you missed hearing either the Systolic or Diastolic number, wait a full minute before reinflating the cuff to allow for the blood that is "trapped" in the arm to re-circulate. Then re-measure the blood pressure
- 29. Write down the final blood pressure reading. Put the systolic pressure before the diastolic pressure. Example: 140/72, 120/68.
- 30. Remove the cuff and help the person return to a comfortable position.
- 31. Clean the earpieces and diaphragm of the stethoscope with an alcohol pad.
- 32. Wash your hands and store the equipment.

Measuring a Blood Pressure – Automatic or Digital Device

- 1. Measure the blood pressure the same time each day if possible (morning and evening)
- 2. Be sure the BP device is in good working condition.
- 3. You will need the following equipment:
 - a. Automatic blood pressure device with cuff and digital gauge
 - b. Blood Pressure Tracker or Diary
 - c. Pen
- 4. Ask the person if he or she has had any caffeine, exercised or smoked in the past 30 minutes. If so, wait 30 minutes before checking the blood pressure.
- 5. If no caffeine, exercise or smoking, have the person relax at least 5 minutes before taking a blood pressure.
- 6. Be sure the room is quiet. Turn off the TV, radio so that you can be sure to hear the blood pressure sounds.
- 7. Wash your hands for 15 seconds and dry.
- 8. Help the person sit up straight in a comfortable position or lie down in bed.
- 9. Have the person place his or her feet flat on the floor if sitting. Do not let the person cross their legs while sitting or lying down.
- 10. Support the person's arm on a flat surface (such as a table) with the upper arm at heart level.
- 11. If sitting on a couch, have the person place the arm on several pillows, so the arm can be level with the heart.
- 12. Remove any tight fitting clothing or sleeves from the person's arm. Never wrap a cuff over the person's clothing.
- 13. Place the blood pressure cuff around the arm just above the brachial artery. Then turn the power on.
- 14. For an automatic model, the cuff automatically inflates once the machine is turned on. For a semiautomatic model, squeeze the rubber bulb to inflate.
- 15. Look at the display screen and write down the systolic and diastolic blood pressure readings.
- 16. After writing down the blood pressure readings, press the exhaust button and the rest of the air will release from the cuff. Both models of devices will automatically deflate.
- 17. If a BP reading is unusually high after taking it with an automated device, repeat the reading using a stethoscope, if one is available.
- 18. Remove the cuff as soon as the reading is complete. Help the person return to a comfortable position.
- 19. Wash your hands and store the equipment.