

Blood Pressure Screening

Clinical Procedure



Supplies

- Stethoscope
- Sphygmomanometer blood pressure cuffs (Adult and Large Adult)

Definition & Purpose

Blood pressure is the force of blood pushing against artery walls. It is expressed by two numbers. The top number is the systolic blood pressure, the pressure blood is exerting against artery walls when the heart beats. The bottom number is the diastolic blood pressure, the pressure blood is exerting against artery walls while the heart is resting between beats. Maintaining proper blood pressure lowers risk for heart disease, stroke, and kidney failure.

Measurement

- Participant should sit in a chair, with feet on the floor, and arm supported at heart level.
- Ask the participant which arm they would like to use and utilize that arm.
 - TotalWellness does not require a specific arm to be used.
- Ask the participant if they have had their blood pressure taken in the past and if they remember what their last reading was.
 - If the participant provides you with a last known reading, inflate the blood pressure cuff at least 30 mmHg above the known systolic blood pressure.
 - If the participant does not provide you with a last known reading, inflate the blood pressure cuff to 180 - 200 mmHg for your first reading.
- Kindly remind the participant to face forward, both feet on the floor, and relax.
- Select appropriate-sized cuff (with cuff bladder encircling at least 80% of the arm) to ensure accuracy.
 - Each blood pressure cuff includes an index and a range, make sure the index arrow is within the indicate range.
- Wrap the cuff around the upper arm with the cuff's lower edge one inch above the crease of the elbow.
 - Make sure the arrow on the cuff is aligned with the brachial artery (the artery on the inside of the arm, opposite the elbow).
- Physically palpate the participant's arm to locate the brachial artery. Lightly press the stethoscope's bell on the brachial artery.
- Close the thumb valve and rapidly inflate the cuff to 180 – 200 mmHg or 30 mmHg over the participant's known systolic blood pressure.
 - Each line on the sphygmomanometer is 2 mmHg.
- Open the pressure control valve and smoothly release air from the cuff at a slow rate (2-3 mm Hg/sec, about one mark per second).
- Listen with the stethoscope and simultaneously observe the sphygmomanometer.
 - When watching the sphygmomanometer note the reading at the point when the pulse sounds (Korotkoff Sounds) first appear.
 - The sound should be a clear tapping noise.
 - Listen for at least two beats to eliminate recording a single erroneous sound.
 - Note the reading at the point when the first pulse sound appears, not the second beat.
 - The reading on the sphygmomanometer when the first pulse sound is heard is the systolic blood pressure.
 - If Korotkoff sounds are heard immediately after releasing the pressure control valve you may need to pump cuff up higher than 200 mmHg to get an accurate reading.
 - Continue steady deflation at 2-3 mmHg/sec and note the reading at which the last pulse sound is heard. The point at which the sounds completely disappear is the diastolic blood pressure.
 - The last pulse sound will likely sound muffled and soft.
 - Continue steady deflation at 2-3 mmHg/sec for at least 20 mmHg below the final reading and then open the pressure control valve completely to release all the remaining air.
- Remove the cuff from the participant's arm.
- Write results on participant results handout.
- Document results on paper consent form or within the participant's electronic record on the iPad.

High Blood Pressure Referral Protocol

If a participant has an initial blood pressure reading of 130/80 mmHg (either value elevated), additional readings, up to three, must be taken. On the second reading, switch cuff to the opposite arm and make sure the participant is sitting with legs uncrossed. If the participant's blood pressure falls below 130/80 mmHg, record the second (lower) reading on the participant's paperwork and allow the participant to move to the next service. If the participant's blood pressure remains elevated (130/80 mmHg or higher) during the second reading, a third reading must be taken. Allow the participant to sit quietly for 3-5 minutes and ask them to relax prior to taking the third reading. Take the third reading using a manual blood pressure cuff. Record the third reading, or the lowest of all three readings, on the participant's paperwork. If after three readings the participant's blood pressure remains elevated (130/80 mmHg or higher) refer the participant to follow up with their primary care provider.

Emergency Blood Pressure Referral Protocol

Individuals with extremely low (less than 90/60 mmHg) or extremely high (greater than 180/120 mmHg) blood pressure readings should be monitored for symptoms and referred to a physician immediately. Call TotalWellness and speak with the Director of Nursing or Medical Director for assistance in accessing the situation. Call 911 if the participant is exhibiting extreme low/high blood pressure symptoms such as severe headache, confusion, dizziness, fatigue, vision problems, chest pain, difficulty breathing or an irregular heartbeat. Complete an incident report if 911 is called.

Interpreting Results

Classification	Systolic (mmHg)		Diastolic (mmHg)
Normal	Less than 120	and	Less than 80
Elevated	120 - 129	and	Less than 80
Stage 1 Hypertension	130 - 139	or	80 - 89
Stage 2 Hypertension	140 or higher	or	90 or higher
Hypertensive Crisis*			
Hypertensive Crisis*	Higher than 180	and/or	Higher than 120

*Individuals in the Hypertensive Crisis category should be referred to a primary care provider/physician immediately.

Important Tips

- In a health screening setting, blood pressures commonly read a bit higher than usual for a variety of reasons, including active environments, participants being unable to sit quietly for a few minutes prior to screening, and "white coat syndrome."
- If a participant questions his/her values offer to take his/her blood pressure again.
- Allow the participant to come back if they are unhappy with his/her result. Participants tend to feel calmer after completing the finger-stick or blood draw portion of the screening (if applicable).
- If a participant is aware that his/her blood pressure is elevated, and the participant is currently working with his/her primary care provider let the participant know that he/she is doing the right thing.
- Recommend that individuals with elevated blood pressure keep an eye on their values by checking their blood pressure frequently (most grocery stores offer free checks) and keeping a log.
- Remember to ask the participant if they have had their blood pressure taken before and if they remember the values. Individuals with high blood pressure will often remember their numbers. By having the known systolic you can be sure to inflate the blood pressure cuff to 30 mmHg over that number; therefore, reducing the amount of retakes due to not inflating the cuff enough.