



Measuring Blood Pressure with Digital Blood Pressure Monitors

Why is it important to collect blood pressure?

- Blood pressure measures the strength of blood being pushed through blood vessels.
 - Systolic pressure (top number) measures the pressure in your blood vessels when your heart beats.
 - Diastolic pressure (bottom number) measures the pressure in your blood vessels when your heart rests between beats.
- If blood pressure is too high, it can strain the heart and arteries and may lead to poor health.
- Ultimately, it is important to measure blood pressure to determine if athletes may need follow-up medical appointments/referrals.
- What's a normal blood pressure?
 - Less than 120/80
- It is important to have an ongoing record of resting heart rate to track health changes and progress towards Athlete's goals.

How do you measure someone's Blood Pressure with a digital blood pressure monitor?

- Have the athlete sit in a chair and place their arm on a tabletop (or tabletop like surface) that is even level with their heart.
 - If you do not have a tabletop, have them rest their arm on their leg.
- Ensure the athlete's feet are flat on the floor and their legs are not crossed.
- If the athlete has on a bulky sweater, sweatshirt or coat please ask them to remove it.
- Push sleeves up the athlete's arm, if necessary.
- Wrap the monitor around the athlete's arm about 2 cm (1/2 inch) or two finger widths above the elbow.
- Make sure the tubing is placed at the center of the arm and is facing towards you.
 - There may be an arrow printed on the cuff to indicate the center. This arrow should line up with the center of the arm.
- Secure the monitor, making sure it is not too tight or too loose.
 - You should be able to put two fingertips beneath the cuff at the top.
 - If your entire fingers can fit under the monitor, it is too loose.
 - If the athlete feels any pain once the monitor is inflated, it may be too tight.
- Explain what is going to happen once the measuring begins and ask the athlete if they have any questions.
- Once the athlete is ready, press the start button.
- Remind the athlete to stay relaxed.
- Once the measurement is complete (monitor deflates) write down the systolic (top number) and diastolic (bottom number) blood pressures and pulse rate on the appropriate form.
 - It should look like this once written 120/80
 - 120 is the systolic pressure
 - 80 is the diastolic pressure



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- If the blood pressure numbers seem too high or too low, write down the numbers and perform the measurement again.
 - Wait at least one minute before performing again.
 - Take the monitor off and put back on the athlete's arm, do not let it stay on the athlete's arm.
 - If the measurement still seems too high try another monitor and/or take the measurement on the other arm.

Recommendations for the most accurate measurement:

- Each program should have three sizes of monitors: pediatric, adult and an extra-large cuff.
- It is recommended that multiple measurement stations be set up so more than one Athlete can be measured at a time. Some Programs may only have the resources for one measurement station and that is okay.
- Measurement stations should have a tabletop (or tabletop like surface) at an even level with the athlete's heart.
- Use a digital sphygmomanometer (blood pressure monitor) because they are easy to use and can be used in noisy environments.
- Purchase blood pressure monitors that measure blood pressure from the upper arm and not from the wrist.
- Make sure you are using the blood pressure monitor that best fits the athlete. If the appropriate cuff is not used it can give incorrect results.
 - The width of the cuff should cover two-thirds (or most) of the athlete's upper arm.
- Ensure that your blood pressure monitors (no matter the type) are working properly before any event that they will be used.
 - Make sure the batteries still have power.
 - Be sure that monitor increases pressure after pressing start.
 - Perform any other checks that your product's manual suggests.
- Have the athlete remove any outer layers (coats, sweatshirts or sweaters) that may interfere with the blood pressure measurement.

Things that can affect Blood Pressure measurements:

- Using the wrong sized blood pressure monitor
- Not using the same measurement instrument throughout the data collection period
- Athletes smoking, eating or participating in any kind of physical activity 30 minutes prior to the blood pressure reading
- Certain medications
- Alcohol consumption
- Athlete's diet, especially if eating large amounts of sodium
- Athlete's stress