

Blood Pressure Monitor (Automatic) Preventative Maintenance

Preventive Maintenance

- Check power supply. If the machine uses batteries, check their voltage and replace when output is low. If wall input is utilized, ensure that the proper power is being used.
- Inspect power cords and plugs. Check AC plug for loose or damaged parts. Verify proper insulation and integrity of cords.
- Assess for leaks, cracks, and occlusions in the cuff, connections, and tubing inside and outside apparatus. Inspect all fittings and connectors.
- Inspect inside circuitry. Verify that all switches operate properly as well.
- Check that any alarms go off when the measured blood pressure is outside of an acceptably healthy, that is if the NIBP has this capability. The clinical staff should establish this range. To test this on yourself, set the parameters such that they should go off when you take your own blood pressure. Once you are assured that the alarms are functional, be sure to set the parameters back!
- Perform a self-test on the BP cuff to ensure cuff is working properly and within reasonable accuracy (± 5 mmHg). Accuracy can be determined by having the clinical staff take your blood manually.

How To: Taking Blood Pressure

1. Prepare the patient.
 - Sitting or lying down
 - Arm unobstructed
 - Ask about blood pressure history
 - Ensure that it is a quiet space and that the patient doesn't move too much – many NIBPs are sensitive to noise and movement
2. Wrap the cuff around the upper arm with leads facing the brachial artery. Be sure that it is the proper cuff size for the patient's arm. The cuff should be about 1-2 cm above the elbow and about level with the patient's heart.
3. Turn on the machine, and press "start" when ready to measure blood pressure.
4. Have the patient remain still and quiet until a blood pressure is displayed. Often times a pulse rate will also be measured and displayed.
5. If the patient has a higher than usual blood pressure, many NIBPs will allow the user to hold the start button until the monitor inflates 30-40 mmHg higher than the expected blood pressure.
6. If the cuff needs to be deflated or reset during inflation for any reason, press the off button.
7. Record the blood pressure.

Examples of ranges for healthy blood pressures:

Age	BP (Systolic/ Diastolic)
Child, <6 months	90-105/70
Child, 6 months to 7 years	105-117/70
Adult	120/80

