

## **Home Blood Pressure Monitoring Patient Instructions**

### UMHS Approved Clinical Care Guidelines

This information is not a tool for self-diagnosis or a substitute for medical treatment. You should speak to your physician or make an appointment to be seen if you have questions or concerns about this information or your medical condition.

### **Buying A Home Blood Pressure Unit**

**Electronic** home blood pressure units are the favored machines to purchase because:

- They do not require a stethoscope
- They are easy to use and last a long time

There are many makers and models of home blood pressure units. Simply put, you can buy an electronic unit with two options-fully automatic or semi-automatic.

**Fully automatic** electronic units:

- Inflate, and measure
- Display the blood pressure with the push of a button
- Are simple to use
- Cost is about \$64-\$78

The **semi-automatic** electronic units are **just as good**, but you need to do more work. You will have to:

- Pump up the blood pressure cuff. The machine will then measure and display the blood pressure.
- Cost is about \$30-\$35

The two main makers of blood pressure units sold in the United States are **Omron** and **A&D**. There are other models sold (Lumiscopes, Sunbeam, SunMark, and Walgreens), but these are made by other makers and sold under other names and model numbers.

**It is better to buy from one of the main makers such as Omron or A&D. These makers must have their products approved by the Federal Drug Administration (FDA) before they can be sold in the U.S. You should only buy upper arm monitors.** The wrist and finger units, although easy to use, are not exact for the measure of blood pressure.

A proper sized cuff is needed for the exact measure of blood pressure. **If you buy a cuff that is too small for your arm you will get a false high reading.** It is better to buy a cuff that is a bit bigger rather than too small of a cuff. If you have a large upper arm, buy a large blood pressure cuff. Omron and A&D both offer larger cuffs for their machines. You may need to buy the unit right from the maker.

### **Correct blood pressure measurement:**

Blood pressure measurements consist of two numbers, the first (higher) number is called the systolic blood pressure and the second (lower) number is the diastolic blood pressure. The pulse is also recorded by all of the electronic machines. An example of a blood pressure measurement is 140/80 mmHg. This means 140 for systolic blood pressure (higher number) and 80 for the diastolic blood pressure (lower number). The blood pressure is measured in millimeters of mercury. A normal blood pressure is 140/90 for most people. A blood pressure of 130/80 is optimal for patients with diabetes, renal insufficiency, retinopathy, congestive heart

disease, coronary heart disease, peripheral vascular occlusive disease, or cerebrovascular disease. A normal pulse is between 60-100 beats per minute (bpm) while at rest.

Blood pressure can vary or change for a number of reasons. Many factors can increase our blood pressure. Blood pressure can be high when we are in pain, upset, right after exercise (even walking), while we are talking, after using tobacco and caffeine products. High blood pressure due to these reasons does not predict future harm. (There are other dangers from using tobacco that you should keep in mind though.)

Blood pressure tends to be lower at night and lowest when we are sleeping. Blood pressure may vary by 50-70mmHg for systolic (the upper number) and 20mmHg diastolic (the lower number) depending on how it is measured. If you measure your blood pressure while talking after having a cigarette or when you are upset it could be 190/100. The blood pressure when repeated in the proper setting could be 120/80. The difference is not the fault of the machine; it is an error in the way the blood pressure measure was done. **The difference is not the fault of the machine; it is an error in the way the blood pressure measure was done.**

### **The correct way to measure your blood pressure is:**

- Do not use caffeine, tobacco, or alcohol for 30 minutes before you measure.
- Measure your blood pressure when you first wake up and before dinner. (Unless your doctor tells you other times.)
- Before you measure your blood pressure, sit in a chair with a back on it for 3-5 minutes, and do not talk. Have paper and pen or the graph given you by your doctor ready to record your blood pressure.
- Use the correct sized cuff for your arm.
- Put the cuff in the proper place on your arm by placing the arrow or tubing on the inside of the elbow.
- Keep your arm at heart level while doing a blood pressure measure. You can rest your arm on a table in a comfortable place.
- If your blood pressure is high you may repeat the reading and record the lowest of the two readings.
- Always measure your blood pressure on the first day of every month both in the morning and at night. (Unless your doctor tells you other times.)

### **The best home blood pressure measure:**

In your doctor's office your blood pressure should be less than 140/90. When you measure your blood pressure at home, it usually is somewhat lower because you are more relaxed at home. Your home blood pressure should usually be less than 140/90. If it is higher than that on average (most of the time); talk to your doctor. If you have diabetes, kidney disease, heart disease, or strokes, your target blood pressure should be even lower (less than 130/80) – talk to your doctor about what your target blood pressure should be.

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**Written by Steven A. Yarows, MD**

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University of Michigan Health System  
734-936-4000